BETTER EQUIPPING RESERVE MILITARY INTELLIGENCE ANALYST TO MEET THE NEEDS OF THE COMMANDER BY CHAMPIONING A PROCESS-DRIVEN TRAINING MODEL

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by

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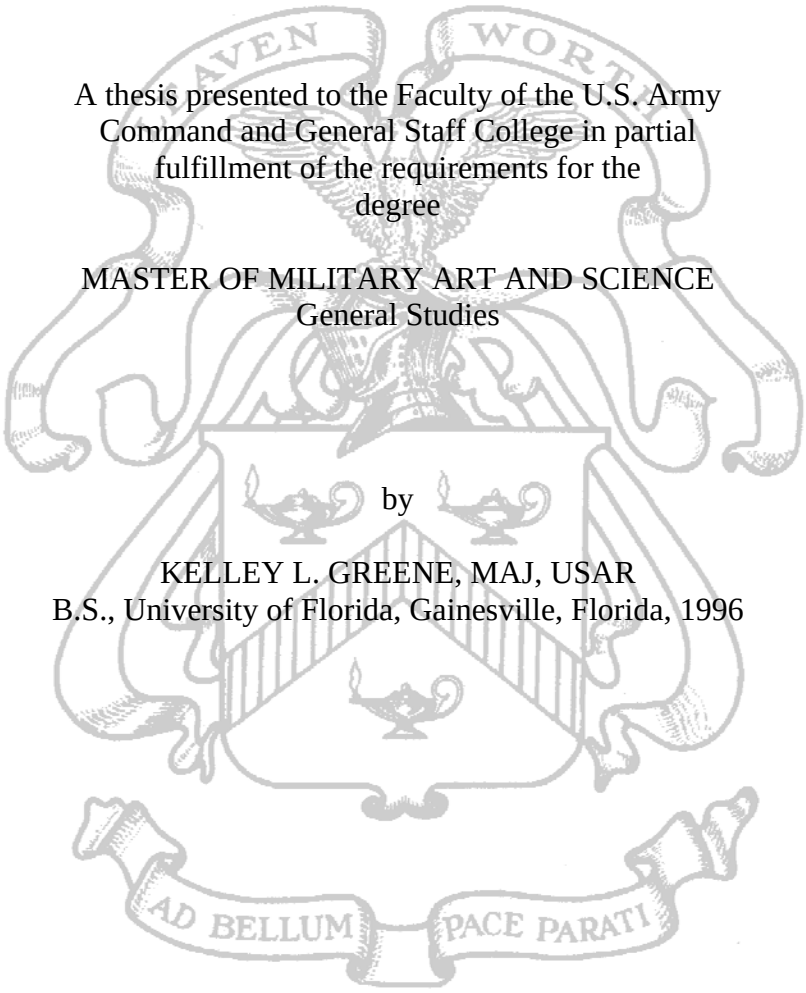

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Would reserve intelligence analyst's benefit from a method of analysis that concentrates on learning integrated analytical processes over creating products independent of operational and environmental factors? Given today's dynamic operational environment, intelligence analysts need to be able to rapidly adapt to adequately build the commander's understanding and visualization. Providing thoughtful analysis is essential to creating federated products that incorporate multiple intelligence disciplines to answer the commander's intelligence requirements. In a time-constrained training setting, reserve analysts strive to retain technical and analytical proficiency. Implementing a process-driven model that focuses on integrated analysis and incorporates individual learning techniques offers a better option for building expertise, improving proficiency, increasing retention and preventing atrophy of perishable skills. This paper offers a feasible option for training military intelligence reserve analysts at the unit level by introducing a process-driven model to encourage collaboration and coordination across disciplines and organizations.

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

BETTER EQUIPPING RESERVE MILITARY INTELLIGENCE ANALYSTS TO MEET THE COMMANDER'S NEEDS BY CHAMPIONING A PROCESS-DRIVEN TRAINING MODEL, by MAJ Kelley L. Greene, 97 pages.

Would reserve intelligence analyst's benefit from a method of analysis that concentrates on learning integrated analytical processes over creating products independent of operational and environmental factors? Given today's dynamic operational environment, intelligence analysts need to be able to rapidly adapt to adequately build the commander's understanding and visualization. Providing thoughtful analysis is essential to creating federated products that incorporate multiple intelligence disciplines to answer the commander's intelligence requirements. In a time-constrained training setting, reserve analysts strive to retain technical and analytical proficiency. Implementing a process-driven model that focuses on integrated analysis and incorporates individual learning techniques offers a better option for building expertise, improving proficiency, increasing retention and preventing atrophy of perishable skills. This paper offers a feasible option for training military intelligence reserve analysts at the unit level by introducing a process-driven model to encourage collaboration and coordination across disciplines and organizations.

ACKNOWLEDGMENTS

This thesis is dedicated to the reserve component (RC) military intelligence (MI) community. The time-constrained training environment of the RC MI analyst presents unique challenges that require creative methods to overcome. Maintaining technical and tactical proficiency is essential to analytical success and necessary for RC MI analyst to remain relevant in the intelligence community. Writing this paper gave me a platform to highlight the training challenges and offer a plausible solution. This completion of this project was made possible through the support and patience of my thesis committee. A special thanks to Dr. Jack Kem, MG William Waff, COL Dawn Devine, and Mr. Roger Linder for your insight and guidance.

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ACRONYMS

A&P	Analysis and Production
AC	Active Component
ACE	Analysis Control Element
AIT	Advanced Individual Training
AKMO	Army Knowledge Management Operation
AOC	Advance Operations Course
AR	Army Reserve
ARFORGEN	Army Force Generation
ARISC	Army Reserve Intelligence Support Center
ARSOUTH	Army South
ASI	Additional Skill Identifier
AT	Annual Training
BA	Battle Assembly
BfSB	Battlefield Surveillance Brigade
CALL	Center for Army Lessons Learned
CCIR	Commander’s Critical Information Requirement
CI	Counter Intelligence
COA	Course of Action
COCOM	Combatant Command
COE	Center of Excellence
COIN	Counterinsurgency
CONOP	Concept of Operation
COP	Common Operating Picture

DIA	Defense Intelligence Agency
DNI	Director of National Intelligence
DoD	Department of Defense
EOD	Explosive Ordnance Disposal
FORSCOM	Forces Command
GEOINT	Geospatial Intelligence
GMTI	Ground Moving Target Indicator
HUMINT	Human Intelligence
IC	Intelligence Community
IDT	Inactive Duty Training
IED	Improvised Explosive Device
IMINT	Imagery Intelligence
INT	Intelligence
INTSUM	Intelligence Summary
IPB	Intelligence Preparation of the Battlefield
IROC	Intelligence Reserve Operation Center
JIOC	Joint Intelligence Operations Center
JRIP	Joint Reserve Intelligence Program
KM	Knowledge Management
MASINT	Measures and Signals Intelligence
MATP	MIRC ARFORGEN Training Program
MI	Military Intelligence
MILGP	Military Group
MIRC	Military Intelligence Readiness Command
MOE	Measure of Effectiveness

MOP	Measure of Performance
MOS	Military Operational Specialty
MOSQ	Military Occupation Specialty Qualified
MSF	Mission Support Folder
MTT	Military Training Team
MUTA	Multi-Unit Training Assembly
NCOES	Non-commission Officer Education System
OES	Officer Education System
RC	Reserve Component
RCIE	Reserve Component Intelligence Elements
SCIF	Sensitive Compartmented Information Facilities
SIGINT	Signal Intelligence
SME	Subject Matter Expert
SU	Situational Understanding
TDA	Tables of Distribution and Allowances
TECHINT	Technical Intelligence
TPU	Troop Program Unit
TR	Train/Ready
TSB	Theater Support Battalion
USAR	United States Army Reserve
USFK	United States Forces Korea
USSOUTHCOM	United States Southern Command
WARISC	Western Army Reserve Intelligence Support Center
WFF	War fighting Function
WMD	Weapon of Mass Destruction

WMSL	Weapon of Mass Destruction List
WOES	Warrant Officer Education System

ILLUSTRATIONS

CHAPTER 1

INTRODUCTION

As the intelligence community (IC) continues to adjust to the post-911 environment there is increased emphasis on establishing and cultivating a more reliable collaborative relationship between civilian and military organizations. Senior leaders collectively recognize the importance of mutually supportive relationships in streamlining production methods, minimizing unnecessary duplication of effort, and ultimately reducing costs. Given the strategic drawdown of military forces and projected budget cuts, the national focus has shifted from conventional hazards to unconventional threats including terrorism, acquisition and transfer of Weapons of Mass Destruction (WMD), and ethnic, political and social upheavals in a variety of regions (Best 2001, CRS-1).

Military Intelligence (MI) military occupational specialties (MOSs) are unique to the military intelligence community and like any technical skill depend on consistent practice to maintain proficiency and relevancy. The original design of the Army Reserve (AR) was to serve as a strategic reserve called upon during times of international military intervention (Williams 2008, 3). The current system is inadequate to produce deployment-ready soldiers who are now a part of the operational rather than strategic reserves for the United States (Bain 2010, iii).

As demonstrated in the aftermath of previous international conflicts, the U.S. reduction of active duty forces increases military reliance of the Reserve component (RC). “Further, although reserve intelligence forces would also face reductions, reliance on those reserve forces will increase” (Williams 2008, 3). Historically, national priority

focused primarily on intelligence support for combat operations and national security with less emphasis on relevant intelligence reporting. However, an imbalance between the amount of data collected and the number of resources available to exploit it has been identified. Therefore the intelligence enterprise must strengthen analytic expertise, methods and practices, tap expertise wherever it resides, and explore alternative analytic views to build an integrated intelligence capability (Director of National Intelligence 2005, 5). Consequently, leaders across the IC concede that a fundamental shift to expand efforts to encompass analytical proficiency and fusion training is needed in order to provide timely and relevant information to military commanders and restore balance within the intelligence apparatus. “A major concern is an imbalance between resources devoted to collection and analysis, with collected data much exceeding analytical capabilities” (Best 2001, CRS-1). With the amount of intelligence collected exceeding the number of analysts available to process and disseminate information, it is essential that leaders focus on developing analysts well versed in collaborative practices.

As some members of the IC question the functionality and relevance of current intelligence production methods within today’s unpredictable operational environment, others seek ways to improve it. “Most analysts understand, to a degree, that a multitude of variables affect military operations; however, the majority of the analysis is merely internalized and never documented in reports or integrated into products, where the data maintains its integrity and contextual relevance” (Whitfield 2012, 5). The challenge therefore is to incorporate multiple sources and adequately integrate multiple disciplines to “paint the picture” that drives timely decision making.

The researcher poses the primary question: Would RC analysts benefit from adopting a "process-driven" training model that focuses on fusion and collaboration in order to help retain technical and analytical skills and remain relevant in a changing AC environment? At the center of this question is the assertion that the current training model needs to be modified. In order to thoughtfully answer the primary question the researcher must answer several secondary questions. What is the current training model? What is a process-driven model? Why is "process" important to intelligence production? Why should fusion and collaboration be the focal point of intelligence training?

As the operational environment dictates the need for comprehensive integration between civilian and military organization, the Reserve Component (RC) faces the unique challenge of adopting a more suitable training model that preserves technical proficiency in a time-constrained environment. "In particular, it is argued that the three major 'INTs,' the major intelligence disciplines—signals intelligence (SIGINT), imagery intelligence (IMINT), and human intelligence (HUMINT) will have to be fundamentally reinvented and this process will have major technical and organizational ramifications" (Best 2001, CRS-2). Over the past ten years Reserve forces have worked side by side and seamlessly integrated with active forces to support the war fighter during combat operations. As the operational environment changed capability shortfalls emerged that require a transition in the way we view the battle space. Among those deficiencies was the realization that the average intelligence reserve analyst was not adequately trained to address intelligence requirements in the counterinsurgent environment when compared to their active component (AC) counterpart.

Although signal and imagery intelligence are more technical disciplines and require specific training the analytical products can be less valuable when viewed in isolation. “Conflicts in Iraq and Afghanistan have provided the United States with documented proof of the value of HUMINT, and the important balance that must be struck between HUMINT and technical intelligence means within current and future intelligence architectures” (Orellana 2005, 20). In order to support decision making at all levels, intelligence analysis must reflect a holistic perspective. When evaluating the operational environment, analysts need to understand how disciplines affect each other and be able to capture those nuances in the context of the final products.

After an in-depth review of Lessons Learned from various tactical and operational intelligence organizations, senior military leaders identified significant shortfalls regarding the quality and quantity of analytical resources required to adequately process and translate collected information into valuable tactical, operational, and strategic intelligence. Additionally important is the need to understand the human aspects of the problem. Whether Soldiers are employing military force, conducting key leader engagements, or providing humanitarian assistance, the analytical process by which intelligence professionals develop assessments should be applicable across the full range of military operations.

The imagery, signal, and human intelligence architectures utilize various methods for collecting information and yield copious amounts of data that requires dedicated manpower and expertise to organize, analyze and process. Subsequently, the requirement for timely and efficient dissemination of intelligence to the commander and war fighter is either inaccurately defined or oversimplified. Although this identified shortfall can be

easily corrected in the active component, it presents training challenges in the RC. Creating a systematic process that can be easily implemented and addresses the specific training requirements for RC intelligence analysts is a necessary and urgent need.

The purpose of this study is to determine if the RC community will benefit from a "process-driven" training model that sets aside uninterrupted time during Battle Assembly (BA) to focus on intelligence fusion and collaboration within the context of the problem in order to best retain the technical and analytical skills required for success in the changing operating environment. The current intelligence reserve training model is product-driven and emphasizes completion of tactical and unit-level requirements. However, conducting analysis and production training in a collaborative environment is most important for analysts to prevent the loss of technical and perishable skills. While AC analysts frequently work in a Joint Intelligence Operations Center (JIOC) and are routinely exposed to various information and intelligence sources, RC analysts are limited to resources and expertise present in their respective units. The primary purpose of the intelligence production cycle is to use a prescribed methodology to create products that inform the commander and enable the decision-making process. Based on the emergence of enemies proficient in unconventional tactics and operate in previously unknown battle space a new intelligence architecture is necessary (Orellana 2005, 16). Incorporating fusion and collaborative processes is not a priority and ultimately limits the quality of information included in the final output.

It has been noted by senior military and civilian intelligence professionals that changes in the operational environment over the past 12 years have highlighted recurring problems and training shortfalls in the "intelligence apparatus." Consequently, the

unconventional threat environment is proving to require a shift in analytical thinking to support the need for greater intelligence and integration in response to the evolving threats. Analysis of Lessons Learned during deployments of Operations Enduring and Iraqi Freedom concluded there are numerous occasions where the Intelligence Community (IC) failed to provide the breadth and depth of information required for effective tactical or operational decision-making. In the past, the commander relied on intelligence that focused on deductive reasoning. However changes in the current operating environment suggest inductive methods may be more beneficial.

In an effort to address the chasm between AC and RC training requirements Congress formed and funded the Joint Reserve Intelligence Program (JRIP) in February 2000. The JRIP's purpose is to "support wartime readiness and peacetime requirements for intelligence collection, analysis and production (A & P), and dissemination by fully utilizing the intelligence elements of the RC" (Williams 2008, 4). It was tasked with the specific purpose of integrating reserve intelligence forces from all components into the AC, joint, and Department of Defense systems. The JRIP directly supports combatant commands in the United States and Europe from joint reserve intelligence centers (JRICs) (Devries 2000, 81). Its purpose is to enhance wartime readiness of reserve forces, provide an apparatus to use RC forces to fill intelligence shortfalls, and demonstrate greater utility of the RC as a force (Williams 2008, 4). While the JRIP has been successful in providing a venue for joint training, analytical collaboration, and utilization of its benefits have yet to be fully realized.

As the Intelligence Community transitions to a more integrated and unified enterprise, the reserve component (RC) must re-access the effectiveness of its current

intelligence training program to stay relevant. This concept is supported by the JRIP as intelligence reservists can only be adequately trained when given access to the same infrastructure, software, and training as active duty forces (Devries 2000, 81). Prior to September 11, 2001, training focused on production methodology that targeted the conventional threat. The basic tasks consisted of terrain analyses, intelligence preparation of the battlefield (IPB), and course of action (COA) development yielding individual products that while relevant require a minimal collaborative effort. Each group of analysts worked within their respective discipline without appreciating the full context of the operational environment and how the output of one discipline impacted the other. The primary actors were easily identifiable and the battlefield easily defined. “During a time of unprecedented demands on the U.S. Intelligence community, conventional architectures will find it difficult to contend with increasingly complex intelligence requirements because national security no longer depends on stalking one enemy–the Soviet Union” (Orellana 2005, 20).

Today’s battle space is significantly different. Fighting an unconventional threat with irregular forces in an asymmetric environment dictates a change in techniques, tactics, and procedures. In the current operational environment there are intangible elements that can be difficult to measure and even harder to teach. It is unwise to overlook the benefit of context and clarity that comes from comprehending the threat in the aggregate. Based on preliminary research future operations will endorse the fact that the current environment is dynamic and rapidly evolving, requiring analysts to broaden their scope of understanding and use a complete approach. Implementing a

comprehensive approach would include incorporating relevant information from other intelligence disciplines, various civilian agencies, and the local populace.

"The purpose of the reserve component is to provide trained units and qualified personnel available for active duty in the armed forces, in time of war or national emergency" (Williams 2008, 7). The AR MI structure is designed to AC intelligence force and aligned with every level of command from tactical to national. However, not all AR MI capabilities are embedded in MI units. There is also MI capability aligned to AC units and joint commands. These units are supported by individual augmentees.

One of the recurring challenges for the RC Soldier is the requirement to retain technical skills and strive for proficiency within their respective disciplines while balancing other unit requirements during a BA weekend. The challenge becomes more difficult when more often than not addressing unit requirements and command-directed tasks tends to monopolize available training time, leaving technical training vulnerable to neglect. In fact, according to MATP instructors some units were unable to conduct technical skills training for more than 60 days, leaving analysts to re-teach and retrain the same skills and lessons during the subsequent drill.

Retaining perishable analytical skills and capabilities is imperative for an RC analyst to stay relevant in the rapidly changing operational environment. It is a fact that RC Soldiers must balance civilian responsibilities and concerns with military duties while maintaining continuity and technical proficiency on a monthly basis. Unlike their active duty counterparts, reservists often experience disjointed, abbreviated training cycles that focus on building products independent of other disciplines. A RC Soldier is rarely given the opportunity to sit side-by-side with their AC counterpart and experience the

unpredictable elements of an active collaborative environment. RC monthly training requirements leave limited time for collaborative analysis and production training and less time for combined information-to-intelligence synthesis unless the commander understands and is able to forecast training opportunities.

Unfortunately, there are a significant number of intelligence units that continue to train to the unit standard instead of the analytical standard. The emphasis is placed on retaining tactical skills versus increasing technical proficiency. Although changes are being implemented throughout the IC, there has not been an equal paradigm shift in support of a collaborative training model. While the Military Intelligence Readiness Command (MIRC) has implemented additional training programs to address this capability gap, additional training requirements arise on an annual basis adding to an already congested training schedule. The MIRC controls a number of specialized units and centers that have specific missions which support all Army components and other elements in the intelligence community (Williams 2008, 19).

The current training model teaches analysts to create products by discipline with limited emphasis on collaboration and situational awareness of the battlefield. In other words, the imagery analyst creates an imagery product and the signal analyst creates a signal product in isolation. And eventually the all-source analyst compiles the data and produces a report. Even though they may work in the same room within the Sensitive Compartmented Information Facility (SCIF), products are routinely created without considering other informational elements and resources. Creating products outside of context and without considering the impact of each discipline diminishes the value to the war fighter and can inhibit the commander’s ability to make an informed decision.

Discipline-focus training is generally conducted during BA and defines the current training model, one of the secondary questions.

Implementing a process-driven method using fusion and collaborative techniques would facilitate discussion, require in-depth analysis, and encourage debate among analysts resulting in a better product. Rather than developing a product in a vacuum the analyst would have to entertain other considerations that may change their initial assessment. It would force the analyst to solicit feedback from other disciplines and incorporate relevant intelligence into the decision making process. Ultimately, implementing a collective process would shift the focus from one dimensional thinking to a more comprehensive approach while encouraging analytical thinking.

One assumption relevant to this research is the proposition that funding for intelligence reserve support will be equal to current levels over the next five years. With the drawdown of forces in the Middle East, the war in Afghanistan slated to end by 2014, and the Congressional mandate to decrease defense spending, the amount of funds available for reserve training will likely decrease. Therefore, available training days will be limited to 15 for Annual Training and 24 days for Battle Assemblies. The 39 days of annual reserve training will provide the boundaries in which relevant training will take place.

A second assumption is that the perceptions of battalion-level leaders within the reserve intelligence community accurately reflect the current situation as it pertains to A&P, fusion, collaboration, and coordination practices. Senior NCOs and warrant officers that facilitate MATP training for the MIRC have a quantitative and qualitative perspective on training shortfalls and a real sense of strengths and weakness in the current

training methodology. Given the level of experience and expertise resident in the reserve component intelligence elements (RCIE) among technical analysts, one concludes that the collective experiences will provide a scale along which shortfalls can be measured.

A final assumption is that although the responsibility for adequately training RC intelligence analysts resides at the unit level, higher commanders will ensure the necessary systems, connectivity, and other resources are available. Training will only have maximum impact if Soldiers have the tools and the time to achieve training objectives. In order to be successful a RC analyst must be able to multi-task. However, strict time constraints during BA produce the unintended consequence of creating an ongoing competition between taskers, unit administrative training, individual training, and technical skills training. Assuming these requirements remain commanders must be committed to making technical training a priority on a regular basis.

In the next chapter the researcher describes the effect the changing operational environment has had on intelligence analysis methodologies across the IC. The researcher specifically focused on RC MI analysts and the challenges of implementing an alternate training model in a time-constrained setting.

CHAPTER 2

LITERATURE REVIEW

The primary research question for this thesis asks if RC analysts would benefit from adopting a "process-driven" training model that focuses on fusion and collaboration in order to help retain technical and analytical skills to remain relevant in a changing AC environment.

There are few sources of information available that specifically offer solutions to perceived deficiencies with the intelligence apparatus as it pertains to reserve analysts. Conversely, numerous articles focus on issues resident in the AC and other government agencies. While there are a significant number of reports and assessments acknowledging the fact that problems exist recommendations for fixing the problem are less obvious. There are numerous studies that assess and identify problems with intelligence support over the past decade but none focus exclusively on the nuances of intelligence reserve support to military, joint or DOD organizations either during peace time or at war.

In fact there are several intangible aspects to training proficient, adaptable analysts that are not taken into consideration in these studies. RC analysts face unique challenges that require fitting 30 days worth of training into a two day Battle Assembly. Additional constraints include creating and retaining continuity, building subject matter expertise, exercising collaboration and coordination practices with relevant training scenarios, and incorporating fusion procedures into the production process. More specifically each discipline (IMINT, SIGINT, HUMINT and all-source) has individual training requirements that focus on technical aspects of the production and analytical process.

Most of the reporting on this topic pre-dates the wars in Afghanistan and Iraq and doesn't account for recent organizational changes. The most valuable references that document the latest reserve experiences during deployments is the Center for Army Lessons Learned (CALL) which captured salient points from the commander's perspective. These reports codify the blended experiences utilizing both RC and AC intelligence support.

There are several initiatives underway to address the deficiencies identified during two wars over the past decade. As the war in Afghanistan winds down and the war in Iraq is over, the army is reassessing its role in the face of a constantly changing operational environment. As the AC reorganizes and draws down, the RC returns to a more predictable op tempo of one weekend a month and two weeks a year. With looming budget cuts the RC will inevitably be asked to do more with less. Under the new Army Drawdown Strategic Guidance, DOD intends to retain a ready and capable reserve component in order to maintain key combat-support and combat service support capabilities" (Feickert 2013, 10). Given the mandate to provide trained, ready, and available intelligence professionals, senior leaders will have to be creative. The RC intelligence community must undergo a paradigm shift and integrate with both the AC and IC to improve the way it trains in order to retain value, increase proficiency, and remain relevant.

A single source of intelligence does not provide the total picture. Using multiple intelligence disciplines during intelligence analysis reduces uncertainty and helps solve problems that could not be solved by a single INT (Jones and Gelerter 2006, 7). Each discipline brings its own perspective and unique capability to augment the deficiency of

the other producing a valuable fused product that the commander can use to make decisions. According to “Back to Basics: Focus on Fundamentals for Intelligence Pre-deployment Training,” the Marine Corps must train analyst in intelligence fundamentals to have an impact on the battlefield. Understanding the importance of all-source analysis is essential for identifying emerging threats in a dynamic operational environment. The author underscores the significant role critical thinking plays in addressing the complexities of intelligence analysis. The ability of creative, adaptable analysts that can modify existing doctrine to compensate for unpredicted changes in the environment contributed to an overall better understanding of the asymmetric threat.

According to the *Army Drawdown and Restructuring: Background and Issues for Congress* report, the requirement for an increased state of readiness for Army Reserve and Army National Guard forces supports the need for the development of a new model. The Army Reserve is aligning reserve units to improve responsiveness to the combatant commanders in regionally sensitive areas. Consequently these adjustments will also offer some benefit for the reservists by creating stability, building and enhancing expertise, and establishing continuity. And although there are calls for the creation of a new model, the details of what that model should look like has yet to be defined.

“To Transform Into a More Capable Intelligence Community: A Paradigm Shift in the Analyst Selection Strategy” is an essay that champions a new way of thinking about intelligence problems and introduces the idea of a capabilities-based model instead of a threat-based one. Placing more emphasis on enemy capability enables better situational understanding and expands the scope of possibility for enemy courses of action. In the past RC senior leaders sought to remedy intelligence proficiency problems

with system accessibility and increased training. “Too much attention has been paid to external fixes and not enough to internal ones” (Wolfberg 2003, 3). In this case external fixes include those factors outside of the analyst’s immediate control. But the author proposes changes in four internal areas: (1) information sharing, (2) intelligence-law enforcement coordination, (3) counterintelligence-counterterrorism coordination, and (4) human intelligence.

Changing the way analysts think is at the core of improving the quality of analysis. The importance of training analysts to think creatively and critically is essential. By defining the desired analytical capability of analysts in terms of how they think rather than what they know, the author further supports familiarization with Clarkson’s conceptual obstacles. “Clarkson, a researcher in the integration of intelligence and technology, sought to identify obstacles to analytical thinking and grouped these into two categories: conceptual and cognitive obstacles” (Wolfberg 2003, 6). Implementing a combination of training and experience will identify thought patterns and assist with overcoming inherent bias. He argues that in order to reduce the risk of uncertainty and surprise in the current operational environment, the IC must shift away from a threat-based model and to a capabilities-based model.

With the country fighting wars on two fronts over the past ten years, it is understandable that there has been limited analysis of the effective integration of reserve forces within the AC intelligence environment. Over the past decade, however, there has been consistent reporting on the problem of relevant, actionable intelligence reporting from the IC; specifically from the RC. Numerous After Action Reviews from units

returning from deployments record shortfalls mostly directed at deficient intelligence reporting regarding the context of framing the problem.

The executive summary, *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan,* examines the relevance of intelligence in a counterinsurgency strategy and recommends sweeping changes in the way the intelligence community thinks and functions. LTG Michael Flynn, former Deputy Chief of Staff for Intelligence in Afghanistan and current Director of the Defense Intelligence Agency (DIA), senior civilian intelligence professionals, and company grade military officers identify specific areas for improvement in intelligence gathering methodology. The main initiatives that he identifies that can easily be addressed are: writing classified and unclassified versions of reports in order to ensure the fullest dissemination; conducting analysis along geographic lines instead of functional lies; and creating Stability Operations Centers to work along with Fusion Centers to centralize analytical efforts. He further addresses the benefits and consequences of questions of balance between "white" and "red" analyses. The Director also stresses the importance of developing relevant intelligence products that are valuable and actionable and can inform tactical, operational, and strategic decisions thereby increasing the understanding of the environment and the enemy.

LTG Flynn, Matt Pottinger, and Paul Batchelor identify three specific areas that support a process-driven training model. The capability to write at classified and unclassified levels, understand cultural sensitivities, and geography. The ability to write at classified and unclassified levels along functional rather than geographical lines is an area that could best be incorporated in a process-driven model. In order to add value to

products and give the commander a comprehensive view of the environment, an analyst must first understand the geography, the people, and cultural sensitivities of the region.

In the current training environment products are often created and developed in a SCIF using INT-specific systems that are not accessible by other analysts. Creating products in isolation limits the scope and stifles creative and critical thinking regarding possible enemy course of action (COA). Additionally, creating a collaborative environment involving multiple disciplines would facilitate inclusive analysis and support joint coordination. Encouraging cross-talk and healthy discussion between INTs offers different perspectives and creates synergy.

While many make the argument that the problems with RC training primarily revolve around the lack of funding, the researcher argues that the main reason for training shortfalls is most closely linked to a misallocation or lack of available training time. Senior leaders within the USAR should recognize the unique training needs for RC analysts and adjust the BA training schedule to support an intelligence-focused training environment. Setting conditions to accommodate collaboration and information sharing within the SCIF is key for development of those skills required for relevant intelligence production.

According to *V Corp CAAT Initial Impressions Report June 2007,* intelligence is a team sport. “A single INT or element with incomplete information rarely ‘solves the puzzle’ alone” (Young 2007, 157). References were made to the ineffectiveness of some elements of reach-back support caused by working in different time zones. The reach-back concept is a method of employing intelligence reserve units to provide remote support to a regionally aligned unit. “Reach back can provide technical analysis, detailed

analysis, and assist with responding to new requirements or those with longer lead times" (Young 2007, 157). While managing the reach-back capability presents challenges and requires thoughtful analysis it can prove to be a valuable tool in ensuring success. For example, employing a reach-back capability may be required if specific capabilities such as high powered computers for data mining or processing large amounts of ground moving target indicator (GMTI) data is necessary. With fewer distractions and a less stressful working environment, analysts in a reach-back role can devote more time and effort to effectively solve complex analytical problems (Young 2007, 158).

Reserve Intelligence Support For Operation Allied Force outlines the DoD approved plan for the use of RC intelligence elements which changes the way Reserve and active forces are integrated. The plan details overall responsibilities of DIA and the AC and emphasizes the need for the full engagement of reservists from peacetime to mobilization. This article outlines the role of JRIC sites to support most phases of intelligence production and the need for increased augmentation as AC forces drawdown. The author further qualifies the benefits of allowing the war fighter to employ reserves as a force multiplier through reach-back.

"Intelligence Sharing Fusion Centers and Homeland Security" provides an in-depth analysis of fusion centers specifically focusing on the challenges these centers pose to National Security objectives. The paper highlights the value of combining state, local, and federal sources of information to create timely, usable intelligence pertaining to Homeland Security. Fusion centers facilitate information sharing and serve as the nucleus for developing actionable intelligence from raw data collected from various sources. By leveraging resources and experience while building trust and strengthening partnerships.

Building trusts hinges upon routine interpersonal contact. This paper confirms the need for sharing and fusing intelligence across the full spectrum of disciplines in both military and interagency mediums.

"Establishing a Framework for Intelligence Education and Training" attempts to address shortfalls initially identified in *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan* regarding the collection and use of intelligence in the field. The author stresses the importance of mental flexibility and adaptive behavior through both training and education. He further explains the importance of using training as a precursor to education to enhance and expand the scope of analysis. While training teaches specific processes that can be easily replicated, education allows an individual to move beyond processes incorporating experience and adapting to the situation as it develops.

The rapid pace of globalization produces a threat environment that is in a constant state of flux. The introduction of nonstate actors and other nontraditional adversaries contributes to an unpredictable, nuanced setting. "The world is not static, and neither is knowledge" (Frerichs 2011, 72). Standardizing analytical processes limits the analyst's ability to learn how to deconstruct, debate, and reconstruct ideas. Conversely, exercising critical thinking and removing discipline-specific standards is an advantage and can help to develop intellectual capacity. Analysts within the IC are best served by exercising initiative to ask questions, engage in dialogue and debate data in order to incorporate the full spectrum of available information prior to constructing a solution.

New and creative approaches are necessary to provide relevant, accurate, and timely intelligence. Whether in a conventional or nonconventional posture, threat

analysis, training, and education are critical to creative reasoning and the application of theoretical constructs. Additionally, the ability to "think outside of the box" and see beyond short term solutions is paramount to producing substantive outcomes.

The relationship between training and education is symbiotic as each requires the other to adequately address deficiencies. Training is necessary to lay the foundation on which to build and further expand expertise. Using repetitive processes as a basis for more in-depth examination provides standardization and establishes basic skills. Once analysts master the basics, additional education further enhances the relationship and builds a platform for sustainable success. "The IC need not frame the argument as either training or education but must look at where each, much like in a solid relationship, builds on its strengths to fill the other's deficiencies" (Frerichs 2011, 73) Therefore both are fundamental to improving the quality of intelligence analysis.

War is not static. Therefore providing relevant intelligence support to the war fighter must be an adaptable, continuous, comprehensive process. Building situational awareness and situational understanding require constant effort and education. Learning about the threat encompasses more than conventional capabilities. Analyzing and incorporating socio-economic elements within the area of operations increase understanding and appreciation for the concerns of the local populace. Unfortunately, "the thorough social-political understanding necessary to produce relevant intelligence has been complicated by an American ignorance of cultural issues, language barriers, difficulty accessing the populace, and the lack of vetted intelligence sources" (Frerichs 2011, 73).

An important and often overlooked skill that enhances the quality of intelligence analysis is the art of critical thinking. An analyst's ability to master understanding mental models, correctly identify fallacies, and incorporate those elements into the creative process improves the evaluation process. According to *Analytical Methods in Intelligence Analysis*, teaching and developing this skill takes time and effort. Teaching the brain how to view things from a different perspective, ideally the enemy's, is vital for relevant examination. Identifying limitations in thought can enable a person's ability to see past a singular point of view (Hanson 2008, 5). Therefore analyst must use their experiences to provide context as they process and filter information examining the situation with a new set of eyes. Teaching analysts to understand and overcome bias to gain situational understanding helps the commander visualize the area of operations, assists with accurately framing the problems, and ultimately chose the best course of action.

"Army Reserve Military Intelligence Time for a Change" proposes a new resourcing methodology for AR MI forces leading to increased education, skill maintenance, and preparedness for long or short term contingencies" (Bain 2010). While implementing the ARFORGEN cycle facilitates skill training at a moderate pace, the lack of time coupled with a complex training process makes progress difficult. It takes time to create intelligence professionals. A human intelligence Soldier requires at least six months of training (not including language training) to operate as part of a team compared to an enlisted signal intelligence analyst which requires a minimum of two years of training. The all source analysts have a shorter training period but must be knowledgeable in all INTs in order to be highly effective in a live environment.

In recent years the AR has placed more emphasis on operational level training to meet increasing global requirements. As the AR expanded its capabilities it built significant expertise in several intelligence functional areas. And while gaps still exists as it pertains to the "9/11 Commission Report", there are areas where the AR has enhanced intelligence capability. The creation of the Military Intelligence Readiness Command (MIRC) as a functional headquarters for the USAR intelligence community concentrated on mitigating perceived shortfalls across the enterprise by providing reserve forces in support of civilian agencies and contingency operations. And although Regional Training Sites offer some enhancement training of basic combat skills they do not address skill qualifications associated with a Soldier's military occupational specialty (MOS).

The most recent work in the area of reserve intelligence support is a program sponsored by the MIRC. The MI ARFORGEN Training Program (MATP) is nested within the Army Training Strategy and supports the ARFORGEN cycle. The MATP was developed to address the challenges inherent in the development and execution of realistic and demanding intelligence training necessary to ensure MIRC units and Soldiers are prepared to perform their wartime missions (MIRC, 2013b, 1). It provides technical training for RC MI analysts to apply analytical skills while increasing proficiency during company level live environment exercises. Instructors coach analysts through developing and honing regional expertise to master the intelligence warfighting function (WFF).

Some weaknesses previously identified that inhibit relevant, value-added training at Reserve installations and drilling sites include the lack of infrastructure and the lack of resources, to include required software. Many reserve training sites are not equipped with

comparable or interoperable equipment that mirrors those of their AC counterpart. However the JRIP has earmarked funds to purchase and install the necessary systems to support analytical, tactical, and operational training. Incorporating these systems at training facilities will expose reserve analysts to real-world missions, reinforce relevant MOS training, foster a mutually supporting relationship with AC counterparts, and improve overall unit readiness.

"Mixing and Managing Four Generations of Employees" is an article that addresses how generational differences in the workplace require different approaches to training. Similar to the civilian workforce, the military has four different generations working side-by-side in the workplace. "At work, generational differences can affect everything, including recruiting, building teams, dealing with change, motivating, managing and maintaining, and increased productivity" (Hammill 2005, 2). Research indicates that people communicate based on their generational backgrounds. Gaining an appreciation for generational learning styles can pay great dividends when applied to training practices. The problems identified regarding training as it pertains to RC intelligence analysts may be rooted in the failure to indentify differences in learning styles and training delivery methods. Training delivery methods should be adapted and customized to meet the collective training needs and accommodate the diverse learning styles of this audience. To work efficiently and effectively and increase productivity and quality, one needs to understand generational characteristics and learn how to use them effectively in dealing with each individual (Hammill 2005, 6).

According to the Monograph, "Transforming Army Intelligence Analysis Training and Doctrine to Serve the Reasonable Expectations and Needs of Echelons

Corps and Below, Commanders, Consumers, and Customers," intelligence operations and training have more often focused on automated tools and processes, but very little efforts have been made to improve reasoning abilities of junior and mid-grade analysts. The author urges continued focus on critical core skills to enhance tactical skill training. "The Army must improve the training of their analysts in line with that of other national agencies, sister services, and joint expectations to provide the best intelligence to their supported commanders and intelligence consumers" (Lewis, 2005). The rapid pace of advancing technology in the military has caused a widening chasm between cognitive capabilities of analyst and information and data collected. The shift to nonconventional warfare requires analysts to become more adaptive in predicting both the operations and intentions of the adversary which underscores need for training intelligence reasoning and human analysis.

Field Manual 6-01.1, *Knowledge Management Operations*, exposes similarities between knowledge management operations and intelligence production processes. Like the analytical process, knowledge management (KM) operators sift through volumes of information to identify relevant information to share between authorized people and underscore the importance of collaboration to the process of knowledge transfer. The manual discusses strategies for supplying knowledge according to an organization's need by enhancing shared understanding and learning. KM processes parallel analytical requirements for collaboration among personnel at different places, improving reach-back capability to other organizations, and facilitating rapid knowledge transfer between units and individuals. By incorporating cognitive learning and socialization within the

operational environment analysts are able to derive knowledge from experiences and skills between leaders, subordinates, and other organizations.

Overall there is sufficient evidence that a different model of intelligence analysis and production (A&P) is needed in order to maximize effectiveness and support the commander's intelligence requirements. There is not a significant amount of material pertaining to training intelligence analysts in particular, however there are training models used in the civilian sector that have military application. Most of the publications relate to the national-level intelligence community focus on training analysts at that level.

The current changes in the operational environment suggest adjustments be made to yield useful and usable results. The ability of the RC to support different parts of the mission simultaneously and tailor intelligence products facilitates complete synchronization by integrating asymmetric elements of the operational environment. The new intelligence architecture must be geared to perform target development and analysis with greater detail on multiple levels (Orellana 2005, 22). Complete integration of individual disciplines is necessary to enable full synchronization of the intelligence apparatus.

Chapter 3 provides an overview of Lessons Learned over the past decade and identifies aspects of the analytical and technical training processes that could influence analyst individual learning techniques and ability to effectively coordinate in a multi-discipline collaborative environment.

CHAPTER 3

METHODOLOGY

The primary research question for this thesis is would RC analysts benefit from adopting a "process-driven" training model that focuses on fusion and collaboration in order to help retain technical and analytical skills and remain relevant in a changing AC environment?

The lessons learned over the past decade have dictated the need for the RC to adapt to ever changing requirements and initiated a shift in reserve training. In order to build readiness for an uncertain future of persistent conflict the IC has initiated a collective effort to improve the intelligence posture. Since 2010 the United States Army Reserve (USAR) working with Forces Command (FORSCOM) and the Military Intelligence Readiness Command (MIRC) implemented several changes in intelligence training in order to increase expertise and build institutional knowledge to better support the AC. As well, the MIRC has made training a primary objective to adequately prepare Soldiers using the framework of the Army Force Generation (ARFORGEN) cycle with special emphasis on individual and collective training opportunities that validate MI skills under the most realistic combat conditions feasible (MIRC 2013e, 2). By introducing this concept, senior leaders hope to enhance the reserve contribution to contingency support and capitalize on every opportunity to conduct individual and collective training.

Drawing upon lessons learned from past deployments, the MIRC continues to implement the MATP with the intent of conducting critical intelligence training throughout the ARFORGEN cycle (MIRC 2013a, 2). MATP is the MIRC training

strategy for meeting the ARFORGEN training requirements. “The MIRC’s objective is to improve the readiness of Army Reserve military intelligence Soldiers and units” (Sands 2006, 27). As of 1 October 2010, MIRC MTOE units in T/R (train ready year)-1 and T/R-2 sent their MI Soldiers, grouped by intelligence discipline, to three quarterly events and one Annual Training (AT) event conducted at the respective regional Center of Excellence (COE) in order to meet the Commanding General’s annual training objectives (Department of the Army 2013, 1).

A careful review of the tenants of MATP training goals for the four year cycle from “reset” to” available” will be used to determine trends organic to the product-driven model. Once all pertinent data has been compiled and evaluated the researcher will be able to determine the relevancy of the research question and the feasibility of incorporating changes to the current model. If shortfalls are identified the researcher recommend additions or modifications to the current model. Finally, the researcher will create and recommend an alternate model if it is determined that efficiencies can be gained.

In order to conduct a comprehensive study of the current intelligence reserve training apparatus the researcher will review various sources. MATP is a fairly new program and historical training data is limited however the researcher will attempt to extrapolate relevant information from the documents available. The sources used in this study include training data collected from both the MIRC G-3/5/7 and the ARISC COE, individual unit training documents, training manuals, articles, MMAS Theses, the Operations Order for ARFORGEN Training, Comprehensive Training Reviews, Lessons Learned, and After Action Reports from Operations Enduring Freedom and Iraqi

Freedom. These documents will provide context for the posed question by describing training challenges from various perspectives.

The interviews with senior reserve intelligence officers and MATP instructors for IMINT, SIGINT, GEOINT, HUMINT, and all-source disciplines will yield a tactical level perspective of the current product-based training model. Interviews with the MATP instructors will describe training methods and assessment tools used to measure analyst proficiency. Each instructor possesses detailed understanding of the core MOS sustainment training methods required for their respective technical discipline. The instructor input will be instrumental in framing the training problem and identifying challenges. The interviews with commanders and trainers will yield current data, examine training standards, identify measures of effectiveness (MOE), measures of performance (MOP), and highlight shortfalls or gaps. Ultimately that resulting information will be used to establish a basis for comparing the current "process" model to the proposed "product" models.

The two units profiled in this study are under the command of the MIRC and participants in MATP which is tailored to meet the unique training needs of intelligence reserve analysts. As the primary source for intelligence reserve training, the MATP program is designed to specifically address the idiosyncrasies of training technical disciplines within the allotted Multiple Unit Training Assembly (MUTA) timeframe. Unlike other MOS's, technical disciplines require mastering complex systems and processes that are constantly changing. Intelligence production is not a static process. In an effort to keep pace with fluctuation MATP offers a progressive training cycle that builds on fundamental analytical skills. MATP consist of quarterly training sessions that

take place at the ARISCs COE for all MI Soldiers assigned to the MIRC Battlefield Surveillance Battalions and Theater Support Battalions. Training is conducted quarterly by discipline over a five year span culminating in an integrated exercise during annual training and all MI Soldiers are required to participate (MIRC 2013e, 4).

To ensure MATP retains functionality and flexibility battalion commanders are required to provide an honest assessment of their unit's capability. The command interviews will provide the commander's honest assessment of their individual training program and the level of proficiency by discipline within the organization. The study will focus on training metrics to ascertain objective evaluation criteria and discover if a deficit exists between MATP formal training and routine BA training. By analyzing the number of hours spent during BA conducting intelligence functions versus the hours spent executing other tactical training requirements the researcher can calculate the actual time spent doing production. The level of proficiency by MOS will be a marker for the effectiveness of the total training regime. Subsequently, the amount of pre-deployment Analysis and Production (A&P) training compared to Warrior Task training will isolate the intelligence WFF from tactical requirements and assist the researcher in highlighting the unequal emphasis on tactical readiness versus technical proficiency for MI Soldiers. This data will set the parameter for the researcher to argue the equal significance of both technical and tactical readiness. Finally, the number of real-world intelligence support opportunities will measure the level of integration with the AC outside the unit's mission. These answers will aid the researcher in determining if a "process-driven" model is needed.

The supporting documents provided will offer training data and identify specific analytical deficiencies based on previous military operations. An ARISC commander will provide data for the specific discipline sponsored at their location. As the host command for MATP training the ARISC commanders provide a higher level assessment of the proficiency of analysts by discipline for T/R-1, T/R-2 and T/R-3 phases. These assessments will provide empirical data based on quarterly training results. All will answer questions that will serve as reliable and credible resources to aid the researcher with establishing a training baseline.

The questions the researcher will pose will solicit the senior officer perspective of the effectiveness of current training as it pertains to retaining technical proficiency of SIGINT, GEOINT, IMINT, HUMINT, and All-source analysts. The ARISCs possess a dedicated cadre to lead Soldiers through the latest Forces Command (FORSCOM) required/recommended MI training for deployment. The ARISCs will provide the equipment, systems, connectivity, and access to intelligence databases required for our Soldiers to truly train as they fight (MIRC 2013e, 6). The information provided by the ARISC cadre will help the researcher define the current training model.

There reserve intelligence organizations used in this study are Military Intelligence Battalion (MIB) #1 and MIB #2. MIB #1 is a Theater Support Battalion that conducts multi-disciplined operational and tactical intelligence collection, analysis, and dissemination in direct support of the 470th MI BDE and the US Army South (ARSOUTH). All operationally aligned MIRC units will have two higher headquarters: the AC supported command and the RC MIRC headquarters (MIRC 2013e, 17). In this capacity, operational alignment is serves as both a training and capability relationship.

This relationship affords the AC command the ability to task mission sets and production requirements to the MIRC unit, consistent with other demands that exist from the unit's RC headquarters.

MIB #1 headquarters is co-located with Bravo Company, which conducts human intelligence (HUMINT) and Charlie Company, which performs counterintelligence (CI) in Orlando, Florida. The analysis and control element (ACE) is in Alpha Company located in Perrine, Florida. The Theater Support Battalion is regionally aligned with Army Component Command (ARSOUTH) subordinate to U.S. Southern Command. The ACE mission is to provide multi-discipline intelligence support. While the unit is not regionally aligned with a combatant command (COCOM) it does provide direct support to the National Intelligence Community. While using RC analysts as a force multiplier is not a new concept establishing a working relationship with the AC and interagency counterparts ensures improved coordination and cultivates complimentary working relationships.

As the Reserve Management Officer for U.S. Southern Command (USSOUTHCOM) for four years, the researcher was responsible for managing the reserve program filling long and short term requirements with qualified intelligence reservists. There were 20-30 validated intelligence requirements funded through the joint reserve intelligence program (JRIP) each year. The majority of those requirements were inside the joint intelligence operations center (JIOC) where analysts from the MIB #1 were seamlessly integrated alongside their AC counterparts. The type of requirements ranged from collection management to SIGINT support. Thus the researcher's personal experiences in production and mission management at the battalion and COCOM level

convey expertise and experience that give her credibility and offers context to research results.

The researcher was the Deputy ACE Chief at MIB #2 in charge of intelligence production. MIB #2 consists of three companies. Alpha company performs real-world training events which augment the 501st MI BDE on the Korean peninsula. By participating in live exercises such as Operation Key Resolve and Ulchi Freedom Guardian, Alpha Company Soldiers are able to conduct intelligence production missions alongside their operationally aligned AC counterparts (U.S. Army Reserve 2013). The company mission is to provide timely and accurate multidiscipline intelligence analysis and reporting performed by trained and equipped Soldiers ready to meet the operational intelligence requirements of the Commander and the 501st MI BDE (U.S. Army Reserve 2013). The mission requires a collaborative effort from various disciplines in conjunction with interagency collaboration and civilian coordination. The researcher synchronized production with the supporting unit, streamlined reporting mechanisms with interagency partners, supervised specialized training, and managed the reach-back mission.

MIB #2 ACE tracks time spent executing production in hours and by item later publishing monthly reports of the number and type of products created. However, given the variety of products created in the analytical setting leaders are working to provide a standard definition to accurately capture production efforts. The products currently tracked include intelligence summaries (INTSUMs), Intellipedia webpage updates, and fused products which included IMINT, SIGINT, and GEOINT products. Even though HUMINT sections contribute to the fused reports, the individual production numbers for those disciplines are not recorded.

The researcher will evaluate training data from MIB #1 and #2 ACEs to establish a training baseline and identify production shortfalls. A review of training metrics by discipline will offer a snapshot of the current situation. By profiling these two MI battalions, the author will be able to draw similarities and differences in the way intelligence problems are being identified and addressed. The author will conduct interviews with senior leaders from both units and each commander will answer ten approved questions in order to gain a realistic perspective on the pros and cons of current and past training at the tactical and operational levels.

Both units have provided analysts in support of real-world missions outside of the routine reserve requirements. MIB #2 is regionally aligned to support the 501st MI Brigade in Seoul, South Korea while the MIB #1 supports several CONUS based AC units. The MIB #2 has a reach-back mission and the MIB #1 does not. MIB #2 focuses support on a single geographical area whereas MIB #1 offers support to multiple geographical areas. By profiling these two MI battalions, the author is able to draw similarities and differences in the way intelligence problems are being identified and addressed. The author will conduct interviews with senior leaders of both units to gain a realistic perspective on training, benefits and shortfalls at the tactical and operational levels.

The researcher will conduct interviews with the two MI BN commanders, an ARISC commander, MIRC G-3/5/7 and MATP INT instructors. Commanders will be asked to provide training metrics as currently implemented, verify actual time-on-task per BA and describe training methodologies pertaining to specific intelligence technical discipline skills training. The interviewees will participate in telephonic interviews. The

questions will address the senior officer perspective of the effectiveness of current training as it pertains to retaining technical proficiency.

The commanders will be asked to provide an assessment of the unit's training program focusing specifically on technical disciplines, evaluate current analytical capabilities, identify analytical strengths and weaknesses, identify assessment and feedback mechanisms and solicit recommendation from interviewees to resolve and/or mitigate training shortfalls. As the host command for MATP training the ARISC commander will provide a higher level assessment of the proficiency of analysts by discipline for T/R-1, T/R-2, T/R-3, and T/R-4 phases. These assessments will provide empirical data based on quarterly training results. All will answer questions that will serve as reliable and credible resources to aid the researcher with establishing a training baseline.

A careful review of the 60 month MATP training cycle from reset to available will provide information used to determine output and trends organic to the product-driven model. In addition the researcher will use the MIRC MI Training Gated Strategy to further delineate the roles and responsibilities of individual units and the institution. Once all pertinent data has been compiled and evaluated the researcher will be able to make a determination of relevancy of the research question and the feasibility of incorporating changes to the current model. If shortfalls exists that can be remedied by implementing a "process-driven" model the researcher will determine the practicality of changing the current model or asking leaders to reconsider the training process. Finally, the researcher will create and recommend an alternate model if it is determined that the margin of improvement is substantial and efficiencies are possible.

In the next chapter the researcher uses the feedback provided by leaders, supervisor and instructors to create a process-driven model. The model is based on standard analytical practices that incorporate learning techniques, information processing preferences, and collaborative practices.

CHAPTER 4

ANALYSIS

The primary research question for this thesis asks if RC analysts would benefit from adopting a "process-driven" training model that focuses on fusion and collaboration in order to help retain technical and analytical skills and remain relevant in a changing AC environment.

Fusing individual and collective thought in our approach to military intelligence analysis has value in supporting a process-driven training model for the RC MI community. Understanding the role of learning styles and learning modes and how they support the analytical process is essential to the success of any RC MI analysis-based training program. Instead of spending valuable time creating products to retain technical proficiency, RC MI analysts should focus on learning how to think critically and creatively both individually and collectively. RC MI analysts must also understand how their discipline feeds the common operating picture (COP) and be able to coordinate and collaborate with other disciplines to create the best product

The Department of the Army supports tactical readiness as the criterion that a Soldier must master. However, a commander may counter that intelligence support and Soldier proficiency is a top priority. Insuring the RC MI analyst has the requisite expertise and knowledge commensurate with their rank is found to be the most important concern to the commander. However, far too often the emphasis on tactical proficiency during training overrides technical requirements. "Core analytical skills, abilities and professional knowledge must remain at the center of analyst's formal and life-long career path training and education" (Lewis 2005, 2). A more accurate statement is that technical

and tactical proficiency are equally important. In other words, leaders have equal authority to ensure Soldiers receive sufficient training in both.

Introducing a process-driven model benefits the RC MI analyst and the collective intelligence community (IC). Incorporating skill sets that concentrate on enhancing individual abilities and learning styles are recommended when developing creative and critical thinkers, building partnerships, and improving group dynamics. A process-driven model underscores the value of teamwork as analysts work toward a common goal by providing their individual technical expertise. Working within the current training framework with minimal modifications, trainers can maximize available time and provide relevant technical training for RC MI analysts.

Intelligence analysis is a process that depends upon experience, expertise, proficiency, and timeliness. “The purpose of intelligence is to provide specific information and analysis about the threat the commander must know in order to make decisions and accomplish the mission” (Smith 2006, 64). In order to be effective analysts must rely on their abilities to critically and creatively to solve problems by breaking them down into component parts, scrutinizing and examining the evidence as they incorporate relevant elements into a final product. They must be able to process large amounts of information and determine the critical aspects in order to produce intelligence to build the commander’s situational understanding and awareness. Analysis is a skill that requires consistent practice to support the constantly changing operational environment; two elements that are very difficult to establish in an RC training setting.

It is difficult to set the conditions for the RC MI analysts because analysis and synthesis are skills that require a concerted effort of time and concentration to achieve.

Analysis is simply processing information to separate it into its constituent parts for individual study in order to observe and evaluate its individual significance (U.S. Army Intelligence Center and School 1999). “Synthesis is the process of deriving meaning from facts...only with proper understanding of the analysis and synthesis process will intelligence analysts have the ability to provide relevant and timely intelligence support to their commanders” (Training and Doctrine Command 2000, iii). The Army is required to train and equip its analysts with the tools to accurately identify the problem and correctly characterize the environment while conducting full spectrum operations. Therefore a major element of any training methodology should focus on first, gaining a complete understanding of the analysis process, having a thorough understanding of how to employ critical and creative thinking and lastly, identify and utilize the appropriate tools to conduct analytical processes.

Setting these conditions for the RC MI analyst is proven to be challenging. Simply teaching an analyst to follow a list of steps to create a product irrespective of other contributing factors unintentionally encourages “group think” and stifles creativity, endorsing popular opinion and diminishing progressive learning and analytical development. Therefore, the Army intelligence capability must include the ability to understand the variations in the identified critical dimensions of the operational environment and provide that regional knowledge to a globally deployable consumer (Smith 2006, 54). When an analyst is able to look beyond the obvious and search for other indicators that distinguish one course of action from another, learning occurs. In addition, critical and creative thinking is developed, reinforcing the analytical skills

needed to work through a “process-driven” model to reaching a viable and a much sought after conclusion.

Much of the current RC MI analytical training involves task repetition. Trainers demonstrate a task and the RC MI analyst repeats it. Task repetition is beneficial to some extent during training; however there is a point when training based solely on repetition becomes inadequate. For example, when analysts are required to create and develop products specific to their discipline, repetition is adequate as the analyst demonstrates the ability to sustain routine tasks. Over time, however, this type of training model can lose credibility if not implemented on a routine basis. The danger in this type of model is the ease with which analysts can find themselves conducting analysis void of deliberation. In the absence of a process-driven model an RC MI analyst may risk questioning or challenging critical information necessary for quality analysis.

While there are some instances when task repetition is needed using a process-driven model, it also introduces layers of complexity. In this setting, RC MI analysts will have to view their individual products in the context of the overall problem set. Adopting a model that champions the “process” of analysis invites descending opinions, respectful disagreement, healthy debate and fruitful dialogue between analysts. Creating a collaborative environment encourages the RC MI analyst to defend predictions, challenge opposing opinions and/or consider alternate points of view. This type of environment also fosters peer and leader networking as well as skill development through collaboration, while facilitating individual and collective learning. RC MI analysts using this model would be encouraged to offer a collective array of perspectives and through discussion, peer-to-peer learning increases. The goal for an RC MI analyst is to see first-hand what

each discipline brings to the process and optimize knowledge from their experienced counterparts to achieve a thorough analysis.

There are a variety of "soft skills" than can be developed to improve analytical ability within the RC MI community. There are several factors that determine the ability of intelligence analysts to achieve and sustain analytical proficiency. Learning styles, background, and methods and modes of processing information all contribute to the quality of intelligence analysis and production. Operating in an asymmetric unconventional setting requires analysts to think abstractly and capture the intangible aspects of the surroundings, to include the human terrain, to sufficiently answer the commander's critical intelligence requirements (CCIR). Leaders acquire knowledge by understanding the processes, activities, and systems available to share information (Headquarters, Department of the Army 2012, 1-2.) Additionally, the quality and integrity of analytical assessments and products wholly depend upon the analyst's ability to view the situation in context of the operational environment.

In the past, analysis in the military context has centered on creating products that feed the intelligence cycle. Depending on the discipline or INT, analysts tend to dissect a problem looking only through the lens of their specialty. The researcher concedes that in order to be effective one must first be proficient in one's own area of expertise however, producing one-dimensional products that have depth and lack breadth is a gross misuse of time and resources. "In fact it is possible for a soldier to be MOS qualified and yet incapable of performing his actual technical intelligence job" (Chase 1990, 14). Coordination and collaboration between disciplines is essential to creating synergy and developing fused, fully integrated, relevant intelligence products.

The Analysis Control Element (ACE) is the hub where RC MI analysts can obtain guidance to tailor products for the consumer and stay abreast of changing requirements. The ACE centralizes analysis and collection management to support the commander in executing mission command across a range of military operations. The formation of the ACE goes beyond consolidation or collocation providing balance to all-source analysis products and synergy to the execution of CI, human intelligence (HUMINT), IMINT, and SIGINT operations (Department of the Army 1995, 2-1). In essence, the ACE should function as an intelligence fusion system to combine single source (GEOINT, SIGINT, HUMINT, CI) and combat information into a complete picture of the enemy or threat situation. Combining and integrating all INTs collectively in a "process" minimizes stove-piping and encourages dialogue between analysts thereby exposing intelligence gaps. "The contributions made by each person are important because anyone may be a source of an idea that may become the catalyst for a solution that accomplished missions and saves lives" (Headquarters, Department of the Army 2012, iv).

The researcher posed the question: Would RC analysts benefit from adopting a "process-driven" training model that focuses on fusion and collaboration as a methodology to retain technical and analytical skills necessary to stay relevant in support of the changing AC environment? In order to adequately address this research question one must first consider the recent changes in the operational environment (OE) and how they affect training models. The lessons learned from the last decade of war will remain constant. While predicting the future is not an exact science, laying the foundation for merging individual and collective thought a model in our approach to analysis has value. According to Army lessons learned, the current intelligence apparatus needs some

adjustments. Even though this observation applies to both the AC and RC equally, additional challenges have been documented within the RC MI community and may very likely require creative thinking to resolve.

The training requirements for RC MI analysts are unique in that unlike their AC counterparts they are constrained by monthly versus daily training cycles. Breaks in momentum for the RC MI analyst may cripple continuity and degrade the value of training as they try to create products as they support the concept of understanding within the analytical process. Solely focusing on creating products to increase analytical proficiency neglects the value of collaborating in a conditional environment, fostering the creative process. A counterpoint to "creating products for production sake" would be to integrate all INTs systematically, yielding comprehensive, relevant, responsive results.

Discovery what is useful to analysis in the production cycle requires critical thinking. In order to grow the skills necessary to support a "process-driven" training model, the focus on output must support a shift from quantity to quality. Rather than measuring the quantity of products (output) a process-driven model would enhance quality. Instead of creating products to publish on a webpage that provides minimal value, the analysts would be obliged to ask a series of questions: Are the products adequately answering the commander's questions and concerns? Are the products relevant to the specific operational environment? Is the information provided able to inform command decisions? Do the products contribute to the commander's understanding or visualization? As the RC MI analyst develops a foundation there should be a direct correlation between the analytical products and the commander's intent to ensure intelligence analysis output remains relevant and supports the commander's

situational understanding and awareness. Changing the way the reserve IC thinks about intelligence support is the first step.

Army Knowledge Management Operations (AKMO) is a mechanism that supports the rapid transfer of knowledge within an organization as a means to efficiently share information between authorized personnel. AKMO is a discipline the Army uses to manage information and facilitate the movement of knowledge by connecting people to content in order to enable shared understanding and learning within organizations (Headquarters, Department of the Army 2012, iv). KM has practical application in a process-driven model as collaboration and interaction between peers is a key contributor to accomplishing required tasks and contextualizing information to support decision-making. Creating common understanding within the analytical team generates mission-specific knowledge necessary for adapting during dynamic operations. “This integration helps to enable the flow of knowledge that resides in individuals and small elements across the organization so it can be applied to mission or operational requirements, and support organizational learning, innovation and performance” (Headquarters, Department of the Army 2012, 1-1).

Insuring Soldiers learn tactical tasks and demonstrate some level of proficiency is valid, however, unlike warrior tasks, teaching a RC MI analyst how to dissect and evaluate information rarely follows the same path. Training someone how to analyze information and reach a logical conclusion is not a single-step process. Of course practice is necessary but it alone is not enough. In order to build on fundamentals and increase proficiency a greater investment is needed. In fact, practice alone may be insufficient for learning procedural tasks where trainees may be expected to operate in multiple areas

(Hogan, Arneson and Salas 1987, 4). Joyce Hogan concludes that what contributes most to the performance of a task is learning the correct response sequence and using training methods tailored for specific training environments. It is important to evaluate proficiency as a part of the learning process so the RC MI analyst has an overall understanding of analysis in its component parts and as a whole. It is equally important to ensure training methods complement individual learning styles and are tailored to the specific discipline.

Further, highlighting the analytical process also fosters a collaborative environment that allows analysts to build and cultivate partnerships and build cohesive teams. Partnership intelligence is a concept that is used to assist businesses in working together to solve problems and create opportunities for meaningful assistance between partners (Braken 2000, 1027). Although a business concept, partnership intelligence has application in a military setting, more specifically, within the ACE. The ability to work together to solve problems and exploit opportunities requires a collective effort. Cultivating a cross-discipline mutually supportive relationship improves responsiveness and enhances comprehensive understanding.

Equally important to ensuring analysts gain understanding of the topic and become proficient is the realization of the intrinsic value of learning models. There are several factors that determine individual preferences when learning a new skill or recalling a skill previously learned. When considering whether a “process-driven” model is optimal compared to a “product-driven” model, the methodology that the RC MI analyst processes and retains information can be the determining factor. Today’s RC MI analysts, more than ever, must learn how to strategically employ critical reasoning,

critical thinking, and fusion while collaborating and coordinating with other disciplines and civilian agencies. The ability to shift from conventional, template threats to more ambiguous, unpredictable threats is eminent to stay ahead of threats and applicable conditions of the current OE. These criteria are mandatory methods to meet expectations of skill sets.

It is a valid argument to suggest that the same skills are necessary to create a product as are needed to remember a process. There is some merit to that position, however, when it comes to creating products to inform a command decision, a holistic approach is required. “A single INT or element with incomplete information rarely ‘solves the puzzle’ alone” (Young 2007, 157). The OE is comprised of many factors that considered individually have little value but when viewed in a broader context pose a viable threat. The analyst has to learn how to “connect the dots” and resist the urge to limit analysis to their discipline. In order to be effective, an RC MI analyst should consider multiple variables when building situational understanding for the commander. Giving each INT a seat at the table during production allows RC MI analysts to draw from a range of experiences as well as expertise to solve the problem. “Experience provides a solid foundation from which analysts can apply critical reasoning and creative thinking to the problem at hand” (Land 2004, 49). Through collaboration and integration, an analytical team can discuss the problem from a “discipline-specific” angle, inject experience and expertise, exercise judgment, and apply a collective multi-discipline perspective, while building consensus. The result is a fused product that increases the commander’s situational understanding (SU) and arguably is more valuable to enhance the COP.

When the RC MI training process includes input from various INTs collectively working the same problem analyst develop supporting relationships that lead to innovative outcomes. According to the Army Learning Concept 2015 one of the basic themes of focused training emphasizes "improving the quality, relevance, and effectiveness of face-to-face learning experiences through outcome oriented instructional strategies that foster thinking, initiative, and provide operationally relevant context." In other words, "one size doesn't fit all." While traditional classroom education still has an important place in training curriculum, dynamic training based on particular needs is the best way to speed comprehension, ensure knowledge retention and improve specific skills in the most effective manner (Test-Peralta 2006, 36).

Incorporating peer-to-peer interaction is a valuable tool to reinforce comprehension and build additional skills. Allowing analyst interaction across disciplines during training can aid with retaining understanding and could be leveraged to facilitate learning additional skills. By creating an inclusive environment the workplace becomes an incubator of innovation at every level offering open and candid disagreement and feedback (DeMaria 2009, 2). No viewpoint is marginalized. In fact, individuals gain knowledge when they place information in context based on what they already know, available factual information, and their judgment and experience (Headquarters, Department of the Army 2012, 1-2). The RC MI community can apply these corporate examples to fostering innovation in the analytical arena and improve the overall intelligence posture.

According to Field Manual 2-0, *Intelligence*, there are eleven "critical variables" that aid in comprehending the threat and the OE. The critical variables are: nature and

stability of the state, technology, regional and global relationships, external organizations, economics, national will, demographics, time, physical environment, military capabilities, and information. To fully understand the threat and environment the analyst should include input from various sources and disciplines. Further, considerations for critical variables require integration of HUMINT, IMINT, and SIGINT applications and also support the concept of integrated simultaneous analysis. Studying and understanding these variables are crucial to analyst understanding and ability to recall vital information. By combining the INTs in this manner the RC MI analyst must apply critical thought to give dimension to the problem and expand the commander's visualization.

A key component of effectively analyzing the threat and developing courses of action is critical thinking and critical reasoning. "Analysts must continuously apply critical reasoning and creative thinking to determine what factors apply to their problem set" (Land 2004, 22).The researcher strongly supports a "process-driven" model to emphasize the importance of considering the analyst's learning preference and applying the correct learning methodology to support enduring proficiency. "There is an erroneously great leap that is made from using tools to support intelligence production and being able to perform and analyze information to understand and predict or forecast intentions" (Lewis 2005, 15). So merely having the required tools is not enough. Trainers have to employ the correct learning methodology to ensure skill retention and guarantee analytical success. Training an RC MI analyst to understand the process of analysis and the value of being able to extrapolate data to enhance the commander's understanding is more valuable than training an analyst to systematically work through a checklist of steps to arrive at a conclusion.

Focusing on individual traits and exploring learning techniques are equally important to the analytical process. So upon arrival at the unit, supervisors should conduct a series of initial assessments to determine the actual level of technical and analytical proficiency and identify individual training needs. As illustrated in KMO, assessments establish a starting point to measure improvements over time. Using tools like self-efficacy and cognitive learning styles to identify learning modes and individual differences helps supervisors create personalized training plans that maximize learning capacity.

Self-efficacy is instrumental in assessing skill and proficiency as it defines the individual level of comfort with performing certain tasks which can also be an indicator of future performance. Self-efficacy is the belief in success generated by self-assessment on the ability to accomplish a specific task (Hsu 2012, 211). People with a high level of self-efficacy are more adaptable to pressure when faced with a problem. Those with high self-efficacy more easily adapt to pressure and remain composed in a chaotic environment while carrying out challenging tasks. Research shows that they are better able to stay on task and are more capable of recovering from frustration. The unpredictable and dynamic environment within an ACE calls for adaptable, flexible, resilient analysts that demonstrate high levels of self-efficacy. Understanding the role self-efficacy plays as a learner characteristic can aid trainers with identifying, mentoring and grooming those Soldiers for higher levels of responsibility. Self-efficacy is an important learner characteristic and major factor in helping learners acquire and sustain skills continuously (Hsu 2012, 211).

Instructors should consider the different types of learning styles when developing training strategies. Incorporating blended training enhances proficiency levels and yields the maximum benefit. Learning styles can be a useful determinant of individual performance. Understanding how someone processes information can help instructors link training objectives with the individual's preferred learning style. It is essential to assess training needs to ensure skills taught during training events are applied to the job. Training effectiveness expert Donald Kilpatrick proposed four levels of evaluation:

1. Determine the trainee's perception of training.

2. Evaluate learning.

3. Evaluate changes in behavior

4. Evaluate impact and results.

Another instrument used to gauge the amount of learning taking place is cognitive learning styles. Cognitive learning styles represent a person's preferred method of collecting and organizing information. In this training context, the trainee's attention and motivation are likely focused on information that he or she deems relevant. There are four learning modes: Concrete Experience (feeling), Reflective Observation (watching), Abstract Conceptualization (thinking), and Active Experimentation (doing). Having a basic understanding of the different learning style can be instrumental in organizing and developing training to improve the overall efficacy. The particular learning style and type of training offered can either inhibit or facilitate the individual learning process (Hogan, Arneson and Salas 1987, 7). Tailoring training by learning style and considering individual cognitive modes allow instructors to more effectively facilitate long-term retention and potentially increase the rate of learning (Bjornberg 2002, 508). Knowledge

managers facilitate the use of explicit cognitive techniques, reflective experience, deliberate practice or socialization within the operational environment to analyze information (Headquarters, Department of the Army 2012, 1-2).

In order to increase the effectiveness of existing training, trainers should also consider individual differences when planning training curriculum. Most practitioners agree that maximum learning is not achieved by all participants in the typical training setting (Hogan, Arneson and Salas 1987, 7). Although these same concepts apply when using a "product-driven" model, adding a collective approach exposes learners to the examples and various levels of experience of their fellow analysts which stimulates conversation and collaboration.

As discussed in KM, the third phase of the KM process is piloting or deploying the KM solution and testing it with a unit to validate (Headquarters, Department of the Army 2012, 3-10). The standard evaluation method used in the military following a training event or exercise is the After Action Review (AAR). According to Peter Senge "the AAR is arguably one of the most successful organizational learning methods yet devised." The main objective of an AAR is to have an open discussion noting the positive and negative aspects of the event. AARs do not necessarily focus on the mechanics of individual or collective learning but the overall outcome. While having a discussion in an open forum does not address leaning at the individual level, instructors are able to obtain feedback that can be used to refine future training. Soldiers provide a preliminary assessment as a group focusing on the major elements of the activity or exercise and rarely reflect on individual learning.

Team-peer assistance is helpful when recommending operational changes and adjustments. Ongoing competency assessments are necessary to measure proficiency while gauging the impact of training and the level of retention help to resolve technical shortfalls. Trainers can use either an AAR or survey to gain insight regarding the overall training experience, administer a written test to measure the degree of performance change, and identify individual training needs. Assessing skills before and after training ensures a maximum return on the investment and codifies the extent of success. Ideally there should be at least two assessments conducted both before and after training: one instructor assessment and one self-assessment (Bjornberg 2002, 511). The results of the assessments can be used as a source of feedback to determine the effectiveness and modify training, as necessary.

Periodic training assessments are found to have merit when seeking collaborative assistance. They can be conducted at three levels. In Level I, participants complete a class evaluation form and rate the quality of training to address several questions: What was most effective and what improvements can be made? This level of assessment is equivalent to an AAR. Level II when participants complete a self-assessment of whether they increased their learning skill, understanding and ability in each of the course objectives (Bjornberg 1987, 515). This assesses if the participant learned the skill or reached the objective. Level III is the application of skills learned. Participants provide feedback quarterly describing how the skills are used in the workplace. Even though neither MATP nor unit training models include Level III assessments this is an area that has been identified for integration in the near term. In this case Level III assessments would be the best indicator of whether long-term learning has taken place.

More importantly trainers should be careful not to elevate technology training over analysis training. The proliferation of technology creates the temptation to overlook the fundamentals of analysis. No matter how proficient the capability, the final product totally depends on the ability and expertise of the analyst. Retaining the technological advantage with warfighting systems is necessary, more importantly, continuing to teach the fundamentals of collective analysis while striving for proficiency will yield the most valuable outcome.

RC MI training challenges are not unique. There have been numerous studies across the corporate enterprise attempting to derive the most effective training methods to maximize productivity. It is rare that a solution seamlessly transferred to another organization in entirety. With some modification, some elements of proven solutions can be integrated into a military organization. Training is defined as a structured step by step method in which a trainer prepares a trainee with an overview of the job, its purpose, and the results desired, demonstrates the task or skill to the trainee, allows the trainee to mimic the demonstration on his or her own and follows up to provide feedback and help (Business 2013). Webster's Dictionary defines training as "the ability to instruct so as to make proficient" (Agnes 2003, 684). Rapidly changing world conditions require that the Army train and equip its intelligence analysts with the tools and techniques to analyze the varied threats to ascertain threat intentions and actions (Land 2004, 12).

Training is the number one priority for most RC commanders as units are required to be tactically and technically proficient. Ensuring Soldiers are technically proficient becomes even more of a challenge in the Reserve Component when time constraints coupled with Soldier availability are compounded by the routine divergence of competing

requirements. More specifically, training requirements for technical intelligence disciplines add another level of complexity when nuances of learning methodologies are added to the equation.

The last step in KM is to implement. Implement is executing the validated KM solution and integrating it into the unit information system that supports mission command components and operations within any phase of the operations process (Headquarters, Department of the Army 2013, 3-11). Over the past three years the MIRC has made significant strides to augment unit training by setting the conditions and facilitating individual and collective technical training opportunities to all RC MI analysts. Through MATP the MIRC provides INT-specific training by SMEs to improve analytical and technical skills. MATP offers an uninterrupted, intelligence-focused training experience targeting SIGINT, HUMINT, GEOINT, and all-source disciplines. Training is primarily task driven and consists of institution and home base training. As the current training model MATP primarily concentrates on technical disciplines.

The MIRC introduced MATP to augment unit training by providing a framework for RC intelligence training support. The program is designed to complement the reserve ARFORGEN cycle and tailored to fit the BA weekend schedule. The MIRC is in the process of implementing changes to MATP as the program continues to evolve addressing training needs as shortfalls are identified. The MIRC recently published the training strategy for FY13-16 and many of the previous recommendations have been included in the revised MATP initiatives. The MIRC G3/5/7 worked with USAR G2, G3/7, FORSCOM G2/3, INSCOM G3, and DA G2 to create a comprehensive plan that

capitalizes on existing mechanisms and resources while broadening the scope of training (MIRC 2013e, 2).

The MIRC has tackled this problem from a senior officer level by providing specific guidance to assist commanders with training challenges. The USAR MI Gated Training Strategy, MATP, Operation Plans (OPLAN), and Concepts of Operation (CONOP) provide the framework to assist unit commanders with developing intelligence-specific training plans. MATP provides a combination of blended training and structured learning for SIGINT, HUMINT, GEOINT, MASINT, and All-Source disciplines primarily focusing on analysis and production processes. Blended training describes a combination of traditional and electronic training methods to meet the needs of a wide range of learning requirements and offers increased flexibility to the student (U.S. Training and Doctrine Command 2013). Immersive instruction uses interactive and learning video-based scenarios to simulate real-world experiences that capture the learner's imagination and place students in situations where they must make decisions and solve problems (U.S. Training and Doctrine Command 2013). When implementing blended training with immersive instructional techniques trainers can easily transition from traditional slide presentations to a more realistic scenario-based instruction.

The USAR-MIRC Gated Training Strategy was designed to sustain USAR MI readiness through unity of effort between the unit, institution, ARISC, and enablers. It is nested within the Army Training Strategy and supports ARFORGEN utilizing the ARISC enterprise as an extension of RC MI unit training capability. The MATP was developed to address the challenges inherent in the development and execution of realistic,

demanding intelligence training necessary to ensure MIRC units and Soldiers are prepared to perform their wartime missions (MIRC 2013e, 4).

The USAR MI Force Generation program is based on a 60 month ARFORGEN cycle comprised of 3 phases which include “reset,” “train-ready,” and “available.” Additionally, the Training Strategy is broken down into four separate gates: institutional, home station training, culminating training event, and allocated/apportioned (MIRC 2013e, 2). Institutional training is conducted during the reset phase centered on individual sustainment and professional military education. Home station training is divided into two parts: unit and submersion/credentialing, analyst common core skills, training fundamentals, and skill sustainment.

MATP is conducted in three phases over customized for reserve organizations. The phases are reset (0-12 months); train/ready 1–3 (13-47 months), and available (48-60 months). The train/ready phase consists of three sub-phases: T/R-1 (13-24 months), T/R-2 (25-35 months), and T/R-3 (36-47 months). The training is tailored for Battlefield Surveillance Brigade MI Battalion (BfSB), Theater Support Battalion (TSB), MI Interrogation Battalion, MI Technical Intelligence (TECHINT) Battalion, and TDA Battalion. The objective for MI Rotational Force Pool–Train Ready 1 (T/R-1) phase units is to achieve proficiency for all tasks at the prescribed unit level of proficiency per the applicable progressive readiness model for their organization (MIRC 2013e, 8).

Reset takes place from 0 to 12 months and has four focus areas: reintegration, professional military education, individual training, and force modernization. Reset is 39 days for Theater Support, BfSB and TDA units and 45 days for TECHINT and Interrogation battalions. During reset the focus for training is on institutional training

(MOSQ) and leader development (OES, WOES, and NCOES). In this phase RC analysts participate in institutional and home station training. Unit level training focuses on individual, section, crew, and team training. All MI MOS assigned Soldiers (E-1 - E-7, W1 - W3, O1 - O3) attend unit/intelligence discipline focused MOS sustainment training led by ARISC or Foundry cadre for two quarterly events and one annual culminating event (MIRC 2013c, 9).

MI Rotational Force Pool-Train/Ready-2 (T/R-2) phase takes place from 25-35 months and is also comprised of 39 training days except for the TECHINT and Interrogation BNs which have 45 days of training. The objective for T/R-2 units is to achieve proficiency for all tasks at the prescribed unit level of proficiency per the applicable progressive readiness model for their organization (MIRC 2013e, 9). During this phase analysts training is focused on developing regional expertise and mastering the intelligence warfighting function.

MI Rotational Force Pool-Train/Ready-3 phase is from 36 to 47 months and includes 45 training days for all units (MI BN (BfSB), MI BN (TS)). The objective for T/R-3 units is to achieve proficiency for all tasks at the prescribed unit level of proficiency per the applicable progressive readiness model for their organization. The training focus at this level is to conduct culminating training events, plan and coordinate with higher HQ, conduct individual and collective training during unified land operations, and achieve company level live environment proficiency.

MI Rotational Force Pool-Available phase is from 48 to 60 months. Units in this phase are expected to be fully prepared to mobilize or be allocated as required. During this phase Inactive Duty Training (IDT) periods are dedicated to theater specific

individual training and collective training at a final AT. Soldiers focus on sustaining intelligence proficiency and regional expertise.

MATP is an effective program that provides structured training by specific discipline for intelligence analysts. As an instructor led training model MATP offers courses quarterly at the INT COE over a three day period (Friday to Sunday). Soldiers travel to the designated locations and participate in individual and collective training to increase proficiency and enhance expertise. MATP is a progressive model that articulates training goals and requirements by phase to ensure MI Soldiers are combat ready.

Building flexibility into the training model allows instructors to make adjustments that build expertise and support proficiency. The desired end-state of our training mission is USAR-MIRC organizations at peak readiness (Individual-Collective levels) (MIRC 2013e, 9). Units arrive at optimal levels of proficiency by following a deliberate training plan nested within the MI Gated Training Strategy and uniquely tailored to their mission and type of unit. Both unit leaders and instructors agree that sustained USAR MI Readiness requires a unity of effort between unit, institution, ARISC, and enablers (MIRC 2013e, 4). Although the responsibility of personal and professional development lay with the individual, the supervisor and commander are ultimately responsible for ensuring the Soldier has the opportunity and the tools necessary to train. Without command emphasis and support any training program will achieve minimal results.

Unit training is the primary source for training. In order to maximize productivity and gain the greatest return on investment commanders must allow sufficient time for training. Exercising mission command will instill trust and confidence in subordinates and provide the incentive to drive productivity. Fostering teamwork and demonstrating a

strong work ethic ensures Soldiers receive a well-rounded training experience. Consider using the training schedule as a guide rather than a rigid, inflexible plan that doesn't allow flexibility. "A detailed plan with rigid structure and timelines is rarely feasible in a workplace environment" (Anonymous 1999, 10).

The Soldier's immediate supervisor is responsible for incorporating this level of fidelity into the RC MI training plan. Conducting the initial assessments to identify an analyst's proficiency profile decreases the amount of retraining required and produces a more effective and efficient analyst. A proficiency profile is a tool that can be used to identify a Soldier's level of proficiency, preferred cognitive learning style and learning mode. If learning styles are identified within 90 days of arrival and assessments conducted to ascertain the level of technical proficiency then an individual training plan can be created to cater to the Soldiers strengths and deficiencies. Building training modules that cater to specific learning modes increases the ability to recall information as it prompts learning in the way that is most natural for the Soldier.

There are several methods available that emphasize the benefit of structured learning experiences and support effective and efficient ways to conduct training. When designing training many psychologists believe "the best way to learn a task is to practice that task." However, this assumption may not always result in effective training designs (Hogan, Arneson and Salas 1987, 4). According to Gagne, there are three psychological principles that are useful for designing training programs. The first step is to break the task down into a set of subtasks. So the basic design of training should: (1) identify the subtasks; (2) ensure each of the subtasks are fully achieved; and (3) arrange the total training sequence to insure optimal effects while transitioning from one component to

another (Hogan, Arneson and Salas 1987, 5). This type of framework is referred to as sequential learning. Since each individual learns at a different rate dividing training material down into subtasks allows analysts to master the sequence at their own pace.

Employing sequential learning in the context of reserve intelligence training in a useful manner requires the integration of other disciplines in each step of the process. Implementing a cross-discipline integrated approach at the intermediate level encourages collaboration and coordination as analysts begin to routinely merge relevant capabilities. While the production process will likely become less predictable the quality of the products should improve.

In order to determine the plausibility of improving RC analytical capability through adopting a "process-driven" model, senior leader interviews were conducted to frame the discussion and establish a baseline for comparison. The interviews of the commander's from two RC Military Intelligence Battalions provided feedback on both the pros and cons of the current training mechanisms. One unit has a robust reserve intelligence support mission and the other unit's primary focus is building technical expertise and analytical continuity. The questions were designed to solicit a balanced perspective from the operational level in order to learn what aspects posed challenges to effective training. The researcher's focus was primarily on training objectives, assessments, measures of performance, and unit training programs for technical disciplines at the tactical level.

Military Intelligence Battalion #1

Military Intelligence Battalion #1 (MIB #1) is a Theater Support Battalion whose mission is to conduct multi-discipline tactical and operational intelligence collection,

analysis and dissemination in direct support of the 470th MI BDE and U.S. Army South (ARSOUTH). The battalion consists of A, B, and C companies geographically dispersed throughout the state of Florida in Miami, Orlando and Jacksonville, respectively. The battalion mission focuses on integrated CI, HUMINT and analysis training. The FY14 training strategy is to revitalize home station training in support of Decisive Action utilizing ARISC support, mobile training teams (MTT) and organic training delivery methods. In addition, provide multi-disciplined intelligence support and participate in collective training events to train on the intelligence war fighting function (WFF).

The battalion ACE, located in Alpha Company (A Co) is composed of SIGINT, GEOINT, and IMINT disciplines and currently executes a two-fold mission: support the 470th MI BDE reach-back mission and provide language support for intelligence security and operations. A Co is housed in a facility not approved for classified production. Analysts are limited to working in collateral spaces and are unable to practice their intelligence specialty on a regular basis. Intelligence-based training is hampered by the lack of classified workspace at the Reserve Training Center so reservists travel to USSOUTHCOM 17 miles away during BA where analysts are able to leverage technical expertise and participate in limited collective training opportunities. The required commute further reduces training time by as much as one hour during BA as Soldier struggle to fulfill competing requirements and warrior task training that routinely consume most of the available time.

MIB #1 commander's number one training priority is ensuring junior analysts receive consistent technical training however competing unit requirements and tasks continue to prevail. Retaining technical proficiency and analytical knowledge is essential

for long term mission support as the ACE prepares to expand its mission set. Most of the unit training is “train-the-trainer” with a current focus on report writing. Analysts spend approximately one and a half hours training and two hours per day during BA practicing requisite tasks. The commander currently has no method to assess proficiency as he opts to concentrate on training fundamental analytical processes and increasing monthly training to at least 4 hours per day over the next FY. Unlike their AC counterparts, RC analysts routinely go 60 days (equivalent to two BAs) or more without using or practicing their analytical skills. Consequently NCOs frequently spend more time retraining basic skills than expanding the depth of existing knowledge to gain and retain proficiency.

Overall the commander is satisfied with MATP training and relies upon quarterly sessions to strengthen basic analytical skills. He additionally suggests more focus be placed on Mission Essential Tasks at the theater level to facilitate seamless integration with the AC. The emphasis on training priorities underpins the commander’s goal to remain flexible and responsive to subordinate units and be available to support various requirements that increase proficiency and meet his objectives to keep soldiers trained. Since assessments were identified as a shortfall in the current training structure, the commander proposed developing a method of assessing analysts by discipline to validate training. These recommendations will increase situational awareness and situational understanding and ensure analysts receive the right level of training by organization.

Military Intelligence Battalion #2

The Military Intelligence Battalion #2 (MIB #2) conducts multi-discipline intelligence collection, analysis and reporting to meet operational intelligence requirements of combatant commands and the National Intelligence Community. Located

on the east coast, MIB #2 comprises the fifth battalion under the 501st MI Brigade's structure. The battalion ACE has a robust supporting role providing reach-back support to several AC units. Working out of the Western Army Reserve Support Center, the unit ACE's intent is to use their position of long term engagement with Korean Peninsula mission sets to provide and embody the enduring continuity of effort and actively support an active component MI BDE. Unlike MIB #1, MIB #2 ACE has a more developed intelligence support posture. The ACE currently has six distinct support mission sets that consist of legacy missions and exercise support. For the legacy missions analysts produce mission support folders (MSF) and maintain the Weapons of Mass Destruction Site List (WMSL) for USFK J2 in conjunction with providing exercise support. MSFs are federated products of WMSL sites that incorporate multiple intelligence disciplines. Practicing this type of integrated approach to production creates synergy and yields quality results.

The expanded support role utilizes the Intelligence Reserve Operations Center (IROC) concept allowing the ACE to offer both surge support and steady-state support to AC units as well as contribute second-shift GEOINT support to both intelligence elements on the Korean peninsula. The "surge" missions are allocated by discipline to support IC requirements. Since the ACE operates in a different time zone, analysts on the west coast work the "night shift" for units on the Korean peninsula.

The IROC initiative was introduced to maximize the resources of ARISCs to facilitate reach-back missions and fill analysis and production shortfalls for RC units operationally aligned to AC units. IROCs work to align AC units or elements at division and below to support technical skill retention, facilitate rehearsals and exercises within

division, tactical formations, and brigades. Using IROC MIB #2 is able to put reservists on orders in support of real-world missions to gain experience and expertise that can be shared with troop program unit (TPU) members in support of BA missions. Through this "process-focused" activity, the ACE is able to create seed products for each mission to use as real examples for analytical training. Ideally, a standard IROC would support multiple mission sets employing various reserve component forces on a full-time basis using long-term orders.

Unfortunately MIB #2 is the exception rather than rule with regard to reserve full time mission support. Most RC units don't have the flexibility or analytical depth to support several mission sets simultaneously. Analysts working steady-state missions routinely share expertise with TPU analysts during BA and boost the level of and institutional knowledge within the unit. Conversely, RC units that don't have a robust production requirement and are not operationally aligned with an AC unit are unable to capitalize on the same type of mutually supportive training relationship.

Even though both unit ACEs have connectivity issues, the MIB #2 is able to rely on an AC LNO for support. One of the main reasons MIB #2 ACE has been successful with maintaining effective communication with the AC and ensuring production needs are met is the assignment of the AC LNO who assists the ACE with connectivity and production issues. The LNO is a company grade officer that assumes the position following a one year tour in the AC unit. Thus the LNO has experience with mission requirements prior to coming to work in the ACE alongside RC analysts and can ensure the reach-back mission is synchronized with daily operations and exercise battle rhythms.

MIB #2 routinely participates in MATP training, however as reservists attempt to include an additional weekend of training into their work schedules the level of participation is expected to decrease. The number of real-world missions the ACE is currently supporting employs 25 analysts. While supporting these types of missions helps to build continuity and expertise, the level of commitment required to fulfill production requirements limit opportunities to participate in additional training. A possible solution to this issue is to incorporate MATP tasks into the unit BA training configuration. Rather than using MATP as an additional training program, units can incorporate the same technical tasks into the BA framework and reinforce training concepts without breaking momentum or changing analytical focus. Another option is to inject real-world mission products into training scenarios to increase authenticity and enhance learning. In a mutually supporting relationship MATP and unit training can be used to reinforce fundamental analytical skills, improve retention, and stimulate the learning process

Additional outlets for analysis, Army Reserve Intelligence Support Centers (ARISC) are instrumental to the success of RC intelligence training and more specifically MATP. ARISC facilities provide resources and workspace for RC MI analyst training. The ARISC staff support unit commanders and facilitate technical training and intelligence support during BA and MATP training weekends. The researcher interviewed an ARISC commander to understand RC training challenges from a trainer's perspective and explain the impact that shrinking budgets, increasing requirements, and limited resources has on MATP.

The Western Army Reserve Intelligence Support Center (WARISC) is the MATP Center of Excellence for GEOINT training. Located on the west coast the primary role of

the WARISC is to provide limited pre and post mobilization training for AC, NG, and AR units. According to the WARISC commander, MATP is a very effective program in theory but greatly challenged in application primarily by a lack of Soldier participation, competing unit requirements, and time availability. Although instructors are ready and available to provide training, the number of Soldiers available to train continues to decline. Since Soldiers are asked to volunteer to attend training the level of participation is not constant making it difficult to plan. The commander believes that adding MATP to a commander's report card, like AR2 statistics, would make attending MATP training a priority and commanders would place more emphasis on analyst participation.

The commander further confirms that MATP does not have a standard method of assessing analytical or technical proficiency. Incorporating a set of assessment tools to measure the effectiveness of training would provide a valuable feedback mechanism between instructors and unit commanders through which technical focus areas can be identified and addressed. Taking this approach would compel the MIRC to work with units to establish and develop curriculum based on actual training data.

The main shortfall identified through interviews with both instructors and unit commanders was the fact that MATP training is an additional requirement that is not mandatory. Although participation is strongly encouraged there are no repercussions to the unit or individual if Solders are unable to attend. While senior leaders emphasize participation the fact that Soldiers are asked to complete two drills within a month is often an issue.

The ARISC perceives the main hindrance to Soldiers attending required MATP training events are time and availability. Soldiers are asked to go above and beyond the

statutory requirements and volunteer a second weekend per month. This additional requirement is not a part of the contractual agreement between reservists and the USAR so it is almost impossible to enforce. Some instructors proposed the idea of conducting MATP training during scheduled BAs in conjunction with unit training to minimize the load of additional requirements. However, one of the challenges instructors face when conducting training during BA is the limited scope of training as training focuses on unit level requirements rather than individual training needs.

Even though unit training is the primary venue for technical training, minimal focus is given to the needs of the individual Soldier. Commanders view individual training as being more valuable to analytical development because in order to conduct effectual collective training analysts have to be individually capable. Most analysts experience collective training just prior to mobilization and are not familiar with individual, squad, and team general training principles. Although some concessions are made for analysts that need to focus on problem areas, instructors train to standard and not the lowest common denominator. Instructors generally will not change instruction to suit Soldiers working at a lower level. Leaders at the operational level point out the limited flexibility in the training schedule affords just 12 days per year for actual intelligence production with no time to practice due to monthly training requirements.

The WARISC collects pre and post self-assessments from all participants following training to obtain feedback of MOE of training sessions. The commander however concedes the data is not analyzed to see if there are overarching themes to drive changes in training. Unit commanders are not given feedback on the Soldier's performance and are unaware of the Soldier's level of proficiency. Since all training has

an application phase where skills are reinforced instructors recommend sessions start with a lecture followed by application to reinforce skills multiple times during the training event. Enforcing repetition builds experience and drives home training in a tactical setting. In order to be relevant training must include both a tactical and technical element.

MATP instructors agree that most analysts are deficient in basic technical skills due to the lack of exposure to their INTs for extended periods of time. Many analysts last trained in their MOS while at advanced individual training (AIT) as junior Soldiers which can be over 3 years in some cases. Post MATP analyst show significant improvement in technical skills if they attend all sessions sequentially. By WARISC estimates attendance decreases by 30 percent with each cycle. For example 50-60 percent of the trainees that attended T/R-1 training returned for T/R-2 training largely because of civilian employer constraints. The goal of T/R-2 is to build on fundamental skills by increasing technical exercises and practicing critical thinking. The culminating event occurs during AT and T/R-3 requiring analysts to independently conduct A&P by discipline in support of the commander's intent.

RC MI units are required to create and execute an Annual Training Plan and adhere to a training schedule. According to USARC Regulation 350-2, the commander's will concentrate on MOS proficiency and language training. The training policy states leaders and soldiers must be technically and tactically proficient. Training must be tactical in nature and enhance the Soldiers AOC/MOS/ASI and/or language skills. The reality, however, is tactical training and other tasks and requirements take precedence over technical training. Based on the responses in the interviews one of the major

inhibitors of intelligence technical training is the abundance of ancillary requirements. Unlike the AC, RC intelligence Soldiers have to fulfill administrative, medical, maintenance and routine duties during the same time period as technical training. Unit commanders confirm analysts may have at little as three hours of technical training per BA.

The tug-of-war between technical and tactical training requirements and ad hoc tasking can be reduced by conducting multiple events at the same time. For example, maximizing the use of time during a training event would fulfill some requirements and generate time to complete others. In essence resolving the training dilemma calls for creative thinking. This is an area where exercising mission command can be helpful. Delegate training requirements to subordinates and trust them to execute.

Though the unit has primary responsibility for individual and collective training, the MIRC provides a training program specifically for intelligence Soldiers. The training occurs quarterly and the MIRC G-3 leverages the ARISC enterprise to provide both sustainment and enhancement training to MI Soldiers assigned to the MIRC units. The ARISCs have a dedicated cadre of instructors to lead Soldiers and units through training on the latest FORSCOM Intelligence WFF task list for core MI MOS sustainment training. Commanders ensure all assigned MI Soldiers participate in this training on a regular basis (as prescribed by the ARISC MATP curriculum for each intelligence discipline and type of unit/organization).

Supervisors should administer testing by discipline during training to determine comprehension and retention (Land 2004, 31). In order to obtain the best results testing should be conducted after each phase of training. At the time this research was conducted

there was no standard assessment tool used to measure the effectiveness of training. As noted in interviews both ARISC and unit commanders agree that this is an area that requires attention. Identifying standard mechanisms to measure effectiveness and performance would help to streamline training and supply a means to provide feedback.

Based on the wealth of information gained from this study regarding learning methods, information processing and collaborative practices, the researcher proposes a framework on which to build a process-driven model. KM practices enhance rapid knowledge transfer between units and individuals, reach-back capability and organizational ability to capture and capitalize on lessons learned throughout the ARFORGEN cycle (Headquarter, Department of the Army 2012, 1-2). The focus areas mentioned in this paper directly correlate to the capabilities needed to support a process-driven model. The KM discipline aligns people, processes and tools within an organization to help units adapt and improve mission performance. Merging elements of KM and intelligence analysis produces a tool that can be used to mitigate some of the training shortfalls within the RC MI community. In order to develop proficiency profiles and capitalize on the idiosyncrasies of individual and collective learning styles supervisors can employ these KM strategies.

KM provides relevant information as the commander transitions between tacit and elicit knowledge to understand and visualize the end state and operational approach through the decision-making process and ultimately to action (Headquarters, Department of the Army 2012, 1-2). Tacit knowledge is an individual's unique knowledge gained from training, life experiences and intuition also referred to as "head" knowledge. Tacit knowledge is transferred primarily through conversations and immediate feedback based

on direct observations of an activity (Headquarters, Department of the Army 2012, 1-4). Elicit knowledge is documented or written information used to support or inform SA. Both are needed to obtain a complete understanding of a given situation as people process information based on circumstances and experience.

According to figure 1-3 tacit knowledge accounts for 80 percent of a person's knowledge base. Since tacit knowledge is difficult to capture and share across an organization with high turnover, it is crucial to convert key knowledge and build continuity through people-to-people interaction.

Concentrating on learning the analytical process and understanding how each INT is used to develop the COP is the first step in the analytical process. In order to create shared understanding and provide timely dissemination of relevant information intelligence analysts must process and exchange large quantities of data and information relying on both personnel experience and documented information.

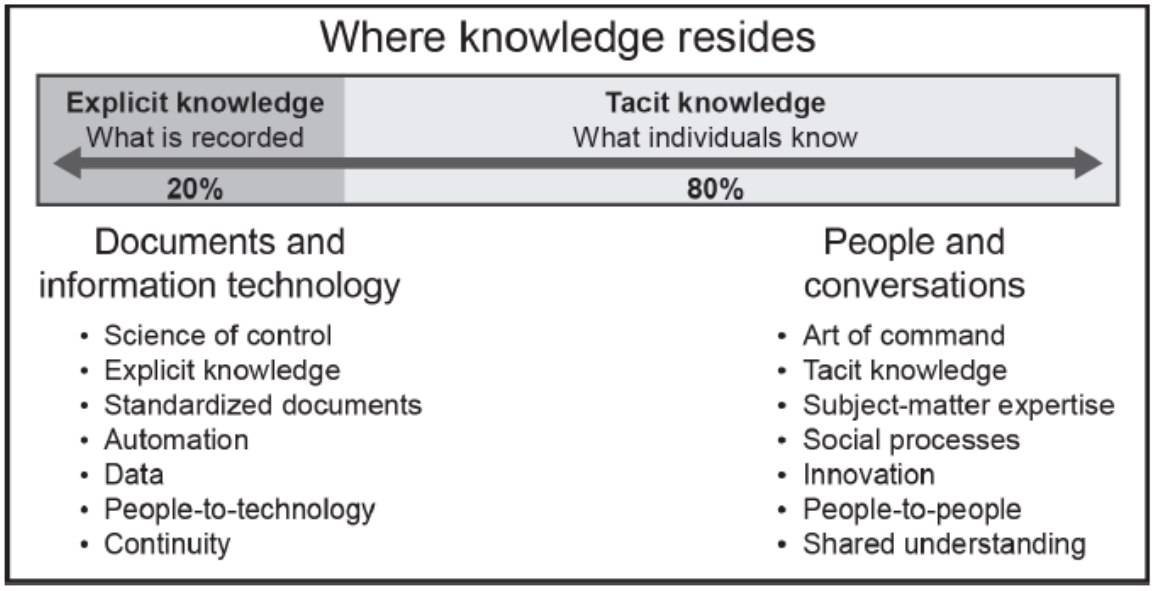

Figure 1. Continuum of Knowledge Strategies

Source: Headquarter, Department of the Army, Field Manual (FM) 6-01.1, *Army Knowledge Management Operations* (Washington, DC: Department of the Army, 2012), 1-12.

The first step in the process-driven model is to evaluate individual learning capacity and develop the proficiency profile to determine the most effective method of knowledge transference.

A proficiency profile is a questionnaire that verifies cognitive learning styles, preferred learning methods, level of self-efficacy, and measures the rate of sequential learning by evaluating how the analyst processes and recalls information. The profile consists of both a self-assessment and a trainer or supervisor assessment that are used to establish a baseline for comparison as training progresses. Administering the self-assessment forces the analyst to identify learning techniques to solve tactical, operational, and strategic problems. The supervisor assessment concentrates on determining technical proficiency and either validates the self-assessment or detects areas of contradiction that

should be targeted for discussion. The supervisor uses the technique that best helps the analyst master the knowledge being transferred (Headquarters, Department of the Army 2012, 3-14). Working together the analyst and supervisor use the proficiency profile to establish a training plan to strengthen vulnerable areas.

The next step is to introduce analysts to a group or team dynamic and initiate collective learning. The section lead or supervisor should form 3-4 person teams grouping similar cognitive learning styles ensuring different INTs are represented. For example, an analytical team could include all-source, SIGINT and GEOINT analysts to provide a variety of technical approaches to accurately frame and solve a problem. Promoting cross-discipline integration facilitates collaboration and dialogue. Connecting analysts with different technical backgrounds allows the team to build on each other's knowledge and supports individual and collective learning.

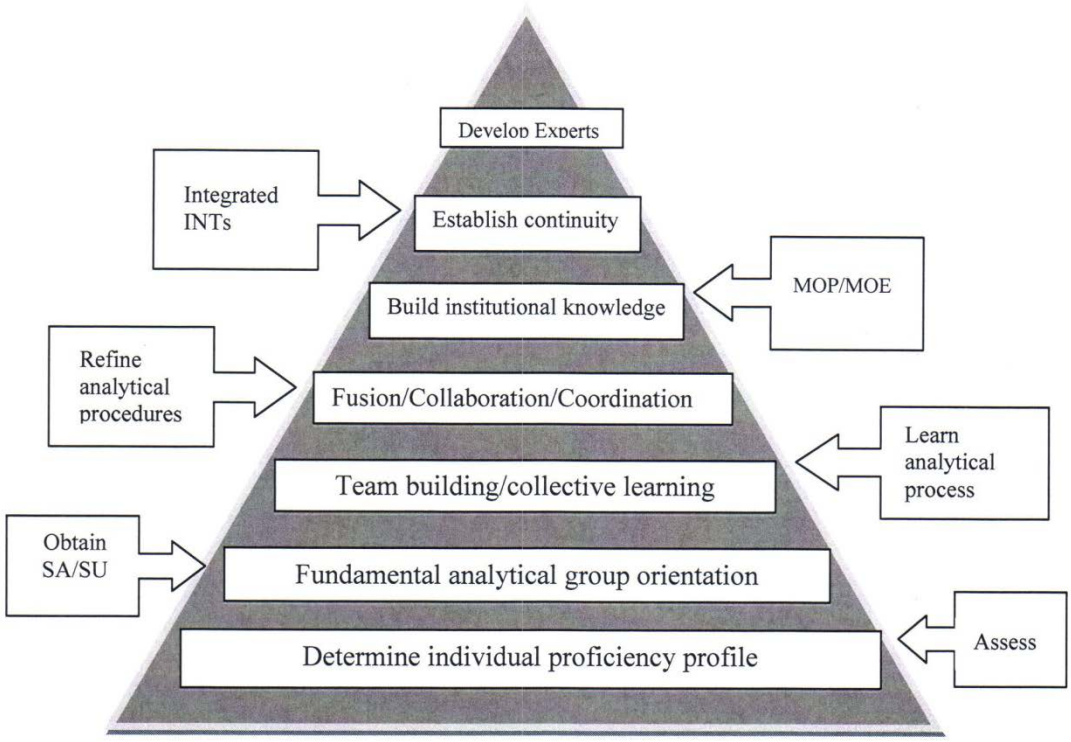

Figure 2. Process-driven Model

Source: Created by author.

The third step is incorporating collective learning through analytical team-building and exchanging knowledge while developing cognitive skills. This is an area where KM can be used to connect operational unit, subject matter experts and peers with relevant experience to obtain their assistance, both before and during an operation (Headquarters, Department of the Army 2013, 1-12). At this stage, lessons learned are incorporated by improving knowledge flow and sharing tacit knowledge connecting those who need knowledge with the subject matter experts. Additionally, analysts can integrate best practices to find the most effective and efficient methods to achieve tasks and objectives.

The next step in the process-driven model is the implementation of fusion, collaboration, and coordination to refine analytical procedures expanding operational reach. In this phase analyst conduct joint analysis identifying and integrating those elements of intelligence specific to their particular INT to create federated products. Supervisors coach analysts on their roles in the process encouraging the use of creative and critical thinking to ensure products are relevant to current or future operations. Using collaborative techniques analysts actively participate in knowledge transfer through sharing experiences and lessons learned. “Here the action-reaction-counteraction consideration and analysis produce knowledge for all participants” (Headquarters, Department of the Army 2012, 3-12). Additionally, analyst can coordinate with subject matter experts (SME) in other organizations to establish mutually supporting relationships that can be leveraged when validating assessments, vetting products, building institutional knowledge, and growing technical proficiency.

By the fifth phase of the process analysts begin to build institutional knowledge of both the mission set and the analytical process. Analysts should demonstrate a significant increase in technical proficiency and understand how to effectively leverage INT capabilities to develop fused intelligence products. Analysis at this level will largely rely on experience and technical expertise gained in the previous stages to facilitate seamless integration of available resources while developing a deeper understanding through practice. Once analysts reach this level supervisors are able to effectively evaluate measures of effectiveness (MOE) and measures of performance (MOP) based on the initial assessments and technical task requirements.

Subsequently commanders are able to build continuity and grow expertise within the unit in support of operations. A process-driven model takes analysts from novice to expert following a progressive system focusing equally on individual and team development. Best implemented at the unit level this model assist trainers and supervisors with assessing technical skills and proficiency to establish a baseline for production metrics. By providing oversight leaders manage the process and cultivate a creative environment that supports collaborative processes and practices. Analyst must utilize all available resources to produce relevant intelligence products to inform timely command decisions. Individual evaluations require an initial investment but will yield significant results over time.

CHAPTER 5

CONCLUSION

The researcher concluded that the product-driven training model, currently in practice within the RC MI community, presents a risk to the commanders when trying to maintain levels of proficiency within their formations in support of the changing AC environment. The researcher identified several knowledge gaps that prevent a product-driven training model from being the optimal method in meeting the diverse needs of our Commanders in support of today's modern day mission. The researcher has developed an argument that with an objective of narrowing knowledge gaps, building knowledge management foundations to increase a shared understanding of knowledge can be achieved with a process-driven training model.

A process-driven training model supports creating a shared understanding through the alignment of people, processes, and tools within the organizational structure and culture in order to increase collaboration and interaction between leaders and subordinates. In addition, a process-driven training model results in better decisions and enables improved flexibility, adaptability, integrations, and synchronization to achieve the position of relative advantage. The RC MI community can only benefit from adapting a process-driven training model into their training cycle as a permanent resident.

Based on these findings the researcher concludes that RC MI analyst would benefit from adopting a “process-driven” training model that focuses on fusion and collaboration in order to help retain technical and analytical skills and remain relevant in a changing AC environment. The researcher described the current training model and explained why collaboration is important in the analytical process. Incorporating other

INTs during the production process significantly improves the quality of the final product by expanding the range of expertise. The research supports the importance of learning tasks through repetition and process and further addresses the importance of process in intelligence production. Finally, the researcher created a process-driven model that offers a structured approach to analytical development for the RC MI analyst. Implementing a process-driven model adds value to technical training, improves analytical ability, supports continuity, and builds institutional knowledge.

Exploring the various aspects of learning styles and techniques emphasized the importance of first focusing on the training needs of the individual. In order to obtain maximum benefit from blended training, leaders need to increase collaboration and interaction between analysts to improve adaptability and enable synchronization. Supervisor and instructors must concentrate on learning and consider individual learning modes when developing training strategies to maximize information retention.

The RC IC is in the process of implementing valuable changes in the approach to analytical and technical training to increase responsiveness to emerging events. However, there are modifications that must be made at the unit level to improve skill retention and aid instructors with achieving measurable results. Understanding the importance of focusing on the individual is critical to obtaining technical proficiency. By determining an analyst's proficiency profile and employing the correct learning methodology instructors can improve technical skills and increase the quality of analytical products. In order to be effective and inform command decisions analyst must be able to solve problems and incorporate relevant elements of information.

MATP provides structured training that incorporates several of the prescribed training practices and strategies discussed in this study. A premier training program, MATP combines unit, institution, commander and enablers in a combined effort to achieve proficiency on all tasks for MI Soldiers

Implementing the process-driven model is possible with minor modifications of MATP but requires command emphasis to mandate technical training during BA. Incorporating peer-to-peer interaction to reinforce comprehension supports the process-driven model. Including each INT in the production process allows analysts to draw from a range of experiences and further supports the concept of integrated analysis. The MATP framework concentrates on fundamental technical training to augment unit training. When drafting training plans at the unit level trainers must incorporate a variety of cognitive preferences into the structured learning plan. Considering learning methods and incorporating various learning styles into the menu of training options would yield immense benefit to analytical performance.

Instructors recommend several options to improve the relevancy and quality of intelligence training available to the RC MI analyst. First, instructors recommend commanders schedule technical training time during each BA ensuring analysts focus on their specific discipline for at least four hours per day. Analysts need at least 4-6 continuous hours per day during BA practicing their craft to retain an acceptable level of proficiency. Placing command emphasis on technical skills training underscores its importance and drives analytical productivity.

A second recommendation is to integrate real-world scenarios and examples into the training curriculum to strengthen knowledge retention and add analytical relevancy.

Incorporating real-world scenarios into MATP training supports learning, adds authenticity, and builds institutional knowledge through increasing situational awareness and understanding. Encouraging instructor and unit commander collaboration when determining course curriculum establishes a line of communication necessary to guarantee the commander's analytical training needs are met. Instructors can provide instant feedback to the commanders and Soldiers, identify candidates for remedial training, and provide metrics the unit can use to assess actual skill levels. Through timely feedback the commander is able to influence MATP training priorities and request modifications to the training curriculum. Additionally, commanders can incorporate MATP tasks and concepts into BA training to reinforce technical skills and increase training value. Seamlessly integrating MATP into the unit training program creates a mutually supportive relationship that supports skill retention and long-term memory.

Restructuring MATP to offer training in four-hour block sections is a final recommendation to improve technical training within the RC MI community. One commander suggested deploying instructors to units during BA weekends to conduct MATP training rather than training at an ARISC COE over three day periods outside of AT. There are several advantages to implementing this option. First, analyst train in at their home-station and travel is not required. Second, conducting MATP training over BA eliminates the need for analysts to request additional time off from their civilian jobs. Building MATP into the BA schedule will increase attendance as Soldiers do not have to commit to another weekend of training each quarter. Instead, cadre can provide quality training in a dynamic environment able to assist, observe, and coach Soldiers while evaluating analytical ability.

The research underscores the importance of using a collective approach to analysis and problem solving. Creating an environment that encourages critical and creative thinking facilitates knowledge transfer and dialogue and supports collaboration. In order for analysis to be productive analysts should debate and defend their answers thereby building trust, confidence and an appreciation for other perspectives. Although conducting single-discipline analysis is sufficient to answer the commander's intelligence requirements conducting intelligence analysis production in a multi-discipline environment adds depth and breadth that enhances the commander's understanding.

Areas identified for future research that exceeded the scope of this paper include designing diagnostic testing to measure analytical capacity, determining the correlation between profile proficiency and knowledge transfer rate and examining the feasibility of employing a process-driven model in other functional areas. Research in each of these areas can be used to identify the correlation between collective learning and information retention. In the context of this study analytical capability is an abstract concept that has not been quantified or supported by empirical data. Producing a mechanism to identify and evaluate learning techniques that are able to predict analytical or technical proficiency would assist with accurately assessing RC MI analyst potential.

APPENDIX A

INTERVIEW QUESTIONS

1. Aside from the MATP program, what other training programs has your unit participated in offer opportunities for analysts to practice their tradecraft?

2. What shortfalls have you see identified in the current MATP training?

3. What is your opinion of the MATP training program?

4. Explain the MATP training process as it pertains to your unit.

5. What is your level of participation in unit training?

6. How do you bridge the gap between MATP and BA to maintain continuity and analyst interest?

6. What types of challenges do you face at the unit level during BA that negatively affect your ability to conduct intelligence training?

7. How many hours spent filling other non-Intel training requirements?

8. Given the current training model, how many hours on average are spent during BA conducting intelligence-related training?

9. What criteria do you use to determine the tasks required to achieve proficiency in each technical discipline (GEOINT, SIGINT, IMINT, CI, all-source)?

10. Which is more valuable to analytical development, collective or individual training? Explain why?

11. As member of the cadre, what recommendations can you offer to improve Intel-specific training for reserve Soldiers?

APPENDIX B

INTERVIEW CONSENT FORM

You have the right to choose whether or not you will participate in this oral history interview, and once you begin you may cease participating at any time without penalty. The anticipated risk to you in participating is negligible and no direct personal benefit has been offered for your participation. If you have questions about this research study, please contact the student at:_(404) 550-6849_ or Dr. Robert F. Baumann, Director of Graduate Degree Programs, at (913) 684-2742.

To: Director, Graduate Degree Programs
Room 4508, Lewis & Clark Center
U.S. Army Command and General Staff College

1. I, _____, participated in an oral history interview conducted by

MAJ Kelley L. Greene, a graduate student in the Master of Military Art and Science

Degree Program, on the following date [s]: _____ concerning

the following topic: Reserve Intelligence Support.

2. I understand that the recording [s] and any transcript resulting from this oral history will belong to the U.S. Government to be used in any manner deemed in the best interests of the Command and General Staff College or the U.S. Army, in accordance with guidelines posted by the Director, Graduate Degree Programs and the Center for Military History. I also understand that subject to security classification restrictions I will be provided with a copy of the recording for my professional records. In addition, prior to the publication of any complete edited transcript of this oral history, I will be afforded an opportunity to verify its accuracy.

3. I hereby expressly and voluntarily relinquish all rights and interests in the recording [s] with the following caveat:

None

I understand that my participation in this oral history interview is voluntary and I may stop participating at any time without explanation or penalty. I understand that the tapes and transcripts resulting from this oral history may be subject to the Freedom of Information Act, and therefore, may be releasable to the public contrary to my wishes. I further understand that, within the limits of the law, the U.S. Army will attempt to honor the restrictions I have requested to be placed on these materials.

_____

Name of Interviewee Signature Date

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